



FADE to BLACK

Jimmy Church 747-228-2051

1
00:02:24,070 --> 00:02:21,570
[Music]

2
00:02:25,430 --> 00:02:24,080
[Applause]

3
00:02:28,350 --> 00:02:25,440
the smoke radio

4
00:02:29,990 --> 00:02:28,360
for the masses headline edition july 8

5
00:02:31,830 --> 00:02:30,000
1947

6
00:02:33,830 --> 00:02:31,840
the army air forces has announced that a

7
00:02:36,150 --> 00:02:33,840
flying disc has been found and

8
00:02:37,350 --> 00:02:36,160
is now in the possession of the army if

9
00:02:40,710 --> 00:02:37,360
the game is rigged

10
00:02:43,830 --> 00:02:40,720
change the game game changer

11
00:02:45,910 --> 00:02:43,840
i occasionally think how quickly our

12
00:02:48,949 --> 00:02:45,920
differences worldwide

13
00:02:49,670 --> 00:02:48,959

would vanish if we were facing an alien

14

00:02:56,070 --> 00:02:49,680

threat

15

00:02:59,990 --> 00:02:58,869

this is fade to black with your host

16

00:03:02,470 --> 00:03:00,000

jimmy church

17

00:03:03,589 --> 00:03:02,480

on the game changer radio network and

18

00:03:08,390 --> 00:03:03,599

kgra

19

00:03:13,220 --> 00:03:11,470

i need your help to get to the year

20

00:03:17,509 --> 00:03:13,230

1985.

21

00:03:19,509 --> 00:03:17,519

[Music]

22

00:03:22,380 --> 00:03:19,519

you're listening to fate to flag with

23

00:03:30,550 --> 00:03:22,390

jimmy church on the game changer network

24

00:03:32,400 --> 00:03:30,560

[Music]

25

00:03:34,550 --> 00:03:32,410

good evening

26

00:03:39,190 --> 00:03:34,560

[Music]

27

00:03:42,390 --> 00:03:39,200

paid to black bespoke radio

28

00:03:48,949 --> 00:03:46,710

masses psy

29

00:03:51,390 --> 00:03:48,959

how you doing today's monday september

30

00:04:01,070 --> 00:03:51,400

14th

31

00:04:05,830 --> 00:04:01,080

2020. let's do this man

32

00:04:06,860 --> 00:04:05,840

258 days into the new year just 108 days

33

00:04:09,589 --> 00:04:06,870

left

34

00:04:13,270 --> 00:04:09,599

[Music]

35

00:04:17,110 --> 00:04:14,390

somewhere in the middle of beautiful

36

00:04:18,550 --> 00:04:17,120

downtown burbank california

37

00:04:20,469 --> 00:04:18,560

and i would like to welcome everybody

38

00:04:23,110 --> 00:04:20,479

listening all around the world all

39

00:04:25,030 --> 00:04:23,120

across the united states hither and

40

00:04:27,990 --> 00:04:25,040

tether to and fro back and forth up and

41

00:04:31,590 --> 00:04:28,000

down east and west north and south

42

00:04:35,830 --> 00:04:34,150

this is fade to black for kjcr the game

43

00:04:39,030 --> 00:04:35,840

changer network and kg r

44

00:04:42,230 --> 00:04:39,040

a the planets i'm your host jimmy church

45

00:04:45,350 --> 00:04:42,240

what is cracking everybody how you doing

46

00:04:48,390 --> 00:04:45,360

hope you had a great weekend

47

00:04:52,070 --> 00:04:48,400

we did we worked

48

00:04:54,870 --> 00:04:52,080

that's right we works

49

00:04:55,749 --> 00:04:54,880

i had coast to coast on saturday night

50

00:04:58,790 --> 00:04:55,759

shock valet

51
00:05:00,550 --> 00:04:58,800
and john greenwald

52
00:05:02,390 --> 00:05:00,560
worked all day yesterday here we are

53
00:05:03,830 --> 00:05:02,400
today monday kicking off a new week and

54
00:05:07,909 --> 00:05:03,840
tonight

55
00:05:10,950 --> 00:05:07,919
very special guest deep prasad

56
00:05:11,590 --> 00:05:10,960
deep prasad is here kicking off a monday

57
00:05:13,749 --> 00:05:11,600
night

58
00:05:15,590 --> 00:05:13,759
joining us for a discussion about the

59
00:05:18,550 --> 00:05:15,600
study of extraterrestrial

60
00:05:19,510 --> 00:05:18,560
intelligence and ufos with modern

61
00:05:22,629 --> 00:05:19,520
physics and

62
00:05:23,590 --> 00:05:22,639
science that is tonight's show tomorrow

63
00:05:28,390 --> 00:05:23,600

night

64

00:05:31,590 --> 00:05:28,400

as well jay widener

65

00:05:34,230 --> 00:05:31,600

jay widener is back we

66

00:05:35,110 --> 00:05:34,240

are going to talk about the life and

67

00:05:38,390 --> 00:05:35,120

times

68

00:05:40,390 --> 00:05:38,400

of terrence mckenna tomorrow night

69

00:05:42,150 --> 00:05:40,400

it's a very special event you're not

70

00:05:44,790 --> 00:05:42,160

going to want to miss that

71

00:05:45,749 --> 00:05:44,800

terrence mckenna i would have loved to

72

00:05:49,270 --> 00:05:45,759

have hung out with

73

00:05:52,390 --> 00:05:49,280

terrence and uh here's a

74

00:05:55,990 --> 00:05:52,400

here's a spoiler alert

75

00:05:57,430 --> 00:05:56,000

jay widener has yeah

76

00:05:59,270 --> 00:05:57,440

so that's tomorrow night the life and

77

00:06:02,790 --> 00:05:59,280

times of terence mckenna

78

00:06:05,990 --> 00:06:02,800

wednesday night looking forward to this

79

00:06:08,790 --> 00:06:06,000

carolyn ford is here we are

80

00:06:10,070 --> 00:06:08,800

going to be talking about the power of

81

00:06:12,710 --> 00:06:10,080

crystal skulls

82

00:06:13,670 --> 00:06:12,720

all night long and that is wednesday

83

00:06:15,510 --> 00:06:13,680

night

84

00:06:17,189 --> 00:06:15,520

what a great week on fade to black

85

00:06:20,469 --> 00:06:17,199

thursday is another fader night

86

00:06:23,029 --> 00:06:20,479

with open lines all night long

87

00:06:25,990 --> 00:06:23,039

all right we're working on episodes uh

88

00:06:27,749 --> 00:06:26,000

four and five of the h factor

89

00:06:29,189 --> 00:06:27,759

and i'll keep you posted on that when

90

00:06:32,309 --> 00:06:29,199

those launch

91

00:06:36,230 --> 00:06:32,319

but uh stay focused and go and

92

00:06:38,950 --> 00:06:36,240

subscribe to our new youtube channel

93

00:06:40,550 --> 00:06:38,960

okay it's called game changer network

94

00:06:41,749 --> 00:06:40,560

it's right there on youtube go and do

95

00:06:44,390 --> 00:06:41,759

that

96

00:06:45,029 --> 00:06:44,400

and there you go so carolyn ford will be

97

00:06:48,070 --> 00:06:45,039

with us

98

00:06:50,309 --> 00:06:48,080

on wednesday night twitter

99

00:06:52,550 --> 00:06:50,319

is at j church radio follow me on

100

00:06:56,790 --> 00:06:52,560

twitter at jchurchradio

101
00:06:59,430 --> 00:06:56,800
and the sandboxes hashtag f2b on twitter

102
00:07:02,150 --> 00:06:59,440
f the number two and b on twitter

103
00:07:05,510 --> 00:07:02,160
hashtag f2bq is fade to black

104
00:07:06,790 --> 00:07:05,520
questions everybody that posts there

105
00:07:09,510 --> 00:07:06,800
just posts questions

106
00:07:11,110 --> 00:07:09,520
except for mark tarana which he does

107
00:07:12,790 --> 00:07:11,120
whatever he wants to do and nobody can

108
00:07:14,790 --> 00:07:12,800
control that man

109
00:07:15,990 --> 00:07:14,800
you can email throughout the show i'll

110
00:07:18,629 --> 00:07:16,000
get to as many as i can

111
00:07:21,670 --> 00:07:18,639
email is jimmy jimmychurchradio.com

112
00:07:25,270 --> 00:07:21,680
speaking of twitter at j church radio

113
00:07:27,430 --> 00:07:25,280

i get home uh from coast to coast

114

00:07:29,749 --> 00:07:27,440

on saturday night i think it was sad it

115

00:07:32,710 --> 00:07:29,759

started

116

00:07:34,629 --> 00:07:32,720

and my emails uh you know and i woke up

117

00:07:37,350 --> 00:07:34,639

uh sunday morning eventually

118

00:07:38,710 --> 00:07:37,360

and uh you know after working till you

119

00:07:40,309 --> 00:07:38,720

know two three four o'clock in the

120

00:07:43,029 --> 00:07:40,319

morning

121

00:07:44,309 --> 00:07:43,039

about uh coast insider not having the

122

00:07:47,510 --> 00:07:44,319

updates

123

00:07:48,070 --> 00:07:47,520

and that's the beauty of following me on

124

00:07:51,270 --> 00:07:48,080

twitter

125

00:07:53,189 --> 00:07:51,280

and being able to reach out to me and uh

126

00:07:55,270 --> 00:07:53,199

i i thought man that's that's gotta be a

127

00:07:58,230 --> 00:07:55,280

mistake it almost sounds like

128

00:07:58,629 --> 00:07:58,240

censorship i mean i know it was a great

129

00:08:01,990 --> 00:07:58,639

show

130

00:08:06,070 --> 00:08:02,000

and it was fun but am i being

131

00:08:09,110 --> 00:08:06,080

censored are the coast insiders being

132

00:08:10,830 --> 00:08:09,120

censored so i gave it a day and i woke

133

00:08:12,150 --> 00:08:10,840

you know it was still going on this

134

00:08:15,189 --> 00:08:12,160

morning

135

00:08:16,469 --> 00:08:15,199

and uh i'm watching twitter and facebook

136

00:08:19,189 --> 00:08:16,479

and my email

137

00:08:20,469 --> 00:08:19,199

like what the heck is going on got it

138

00:08:22,710 --> 00:08:20,479

fixed today

139

00:08:23,589 --> 00:08:22,720

turned out to be just a technical snafu

140

00:08:25,589 --> 00:08:23,599

wasn't anything

141

00:08:27,350 --> 00:08:25,599

it wasn't a big deal but you know i'm

142

00:08:30,230 --> 00:08:27,360

just like you guys

143

00:08:31,430 --> 00:08:30,240

something like that happens you

144

00:08:36,630 --> 00:08:31,440

immediately go

145

00:08:41,589 --> 00:08:39,589

i did and i'm i'm a host at coast to

146

00:08:43,190 --> 00:08:41,599

coast and i win conspiracy

147

00:08:45,110 --> 00:08:43,200

you gotta love that but that's why you

148

00:08:48,310 --> 00:08:45,120

need to follow me on twitter

149

00:08:49,030 --> 00:08:48,320

at jchurchradio and use that hashtag f2b

150

00:08:52,230 --> 00:08:49,040

because

151
00:08:55,829 --> 00:08:52,240
that's the quickest way to get to me and

152
00:08:56,550 --> 00:08:55,839
it worked all right yeah i'm wondering

153
00:08:58,550 --> 00:08:56,560
if i hadn't

154
00:09:00,790 --> 00:08:58,560
said anything i'm wondering how long

155
00:09:02,150 --> 00:09:00,800
that would have gone on for

156
00:09:03,829 --> 00:09:02,160
you know because they move on to the

157
00:09:05,430 --> 00:09:03,839
next coast show the next

158
00:09:07,110 --> 00:09:05,440
next thing you know it's three four days

159
00:09:10,470 --> 00:09:07,120
old i'm not so

160
00:09:13,430 --> 00:09:10,480
sure but they got it fixed all right

161
00:09:15,670 --> 00:09:13,440
email is jimmy jimmychurchradio.com lots

162
00:09:19,030 --> 00:09:15,680
of breaking news today man

163
00:09:20,949 --> 00:09:19,040

crazy stuff going on i'm gonna start

164

00:09:22,710 --> 00:09:20,959

i'm gonna start over in japan because

165

00:09:25,829 --> 00:09:22,720

today japan's

166

00:09:29,190 --> 00:09:25,839

defense minister taro kono

167

00:09:31,670 --> 00:09:29,200

ordered the self-defense forces of japan

168

00:09:33,430 --> 00:09:31,680

to follow standing orders for dealing

169

00:09:36,550 --> 00:09:33,440

with unidentified

170

00:09:37,269 --> 00:09:36,560

aerial objects that could pose a threat

171

00:09:40,550 --> 00:09:37,279

to japan

172

00:09:41,269 --> 00:09:40,560

security in a statement como asked the

173

00:09:43,350 --> 00:09:41,279

sdf

174

00:09:44,470 --> 00:09:43,360

members to record and photograph any

175

00:09:47,110 --> 00:09:44,480

such objects

176

00:09:48,550 --> 00:09:47,120

that they encounter or that enter

177

00:09:51,750 --> 00:09:48,560

japanese airspace

178

00:09:54,550 --> 00:09:51,760

and to take steps for necessary analysis

179

00:09:55,350 --> 00:09:54,560

of the sightings including information

180

00:09:58,630 --> 00:09:55,360

provided

181

00:10:01,110 --> 00:09:58,640

separately by the public very

182

00:10:02,470 --> 00:10:01,120

interesting now while the defense

183

00:10:05,590 --> 00:10:02,480

ministry says

184

00:10:09,269 --> 00:10:05,600

there have been no known cases

185

00:10:11,030 --> 00:10:09,279

of the sdf encountering ufos

186

00:10:12,949 --> 00:10:11,040

the latest move comes after the united

187

00:10:14,550 --> 00:10:12,959

states defense department established a

188

00:10:17,590 --> 00:10:14,560

special unidentified

189

00:10:20,310 --> 00:10:17,600

aerial phenomenon task force last

190

00:10:21,430 --> 00:10:20,320

month i like their their use of words

191

00:10:24,470 --> 00:10:21,440

unidentified

192

00:10:26,870 --> 00:10:24,480

ariel objects so that's u

193

00:10:28,069 --> 00:10:26,880

a o would do do we have a new one not

194

00:10:31,110 --> 00:10:28,079

ufo u

195

00:10:35,829 --> 00:10:31,120

a o not u a p but u

196

00:10:38,230 --> 00:10:35,839

a o u a o unidentified aerial objects i

197

00:10:43,750 --> 00:10:38,240

kinda like that

198

00:10:46,710 --> 00:10:43,760

big announcement today and it's a biggin

199

00:10:47,670 --> 00:10:46,720

a team of researchers has apparently

200

00:10:51,190 --> 00:10:47,680

discovered

201
00:10:53,430 --> 00:10:51,200
phosphine gas on the clouds of venus

202
00:10:56,470 --> 00:10:53,440
according to space scientists

203
00:11:00,150 --> 00:10:56,480
phosphine might be most probably of

204
00:11:02,790 --> 00:11:00,160
biotic origin what

205
00:11:03,350 --> 00:11:02,800
and it clearly indicates that alien life

206
00:11:07,430 --> 00:11:03,360
at least

207
00:11:11,750 --> 00:11:07,440
in its microbial form could be thriving

208
00:11:15,630 --> 00:11:11,760
on venus wow at today's press conference

209
00:11:17,670 --> 00:11:15,640
professor jane greaves revealed that

210
00:11:20,230 --> 00:11:17,680
microorganisms could be living in the

211
00:11:22,949 --> 00:11:20,240
hostile atmosphere of venus

212
00:11:25,190 --> 00:11:22,959
according to greaves phosphine is

213
00:11:27,750 --> 00:11:25,200

usually detected where microbes

214

00:11:29,030 --> 00:11:27,760

are surviving without the presence of

215

00:11:31,990 --> 00:11:29,040

oxygen

216

00:11:33,190 --> 00:11:32,000

during her briefing the scientists also

217

00:11:37,350 --> 00:11:33,200

called venus

218

00:11:41,190 --> 00:11:37,360

a living habitat air quotes

219

00:11:42,069 --> 00:11:41,200

however researchers revealed that they

220

00:11:45,430 --> 00:11:42,079

are not claiming the

221

00:11:47,590 --> 00:11:45,440

presence of alien life on venus but are

222

00:11:48,949 --> 00:11:47,600

only talking about the discovery of

223

00:11:51,990 --> 00:11:48,959

phosphine gas

224

00:11:56,310 --> 00:11:52,000

which remains a mystery to them

225

00:11:59,910 --> 00:11:56,320

as it is a biological origin

226

00:12:02,389 --> 00:11:59,920

check this normally phosphine is the

227

00:12:03,670 --> 00:12:02,399

sign of biological degradation of

228

00:12:07,990 --> 00:12:03,680

biomass

229

00:12:11,110 --> 00:12:08,000

and the decay of biological matter

230

00:12:13,590 --> 00:12:11,120

that's crazy stuff it's big news living

231

00:12:15,829 --> 00:12:13,600

in the clouds it's angels

232

00:12:17,110 --> 00:12:15,839

i'm going on the record it's angels

233

00:12:25,030 --> 00:12:17,120

angels

234

00:12:27,590 --> 00:12:25,040

in the clouds halos i'm just saying

235

00:12:28,629 --> 00:12:27,600

all right the other big news man lots of

236

00:12:33,590 --> 00:12:28,639

big news today

237

00:12:34,790 --> 00:12:33,600

this is big news the perfectly preserved

238

00:12:38,150 --> 00:12:34,800

remains of an

239

00:12:40,870 --> 00:12:38,160

ice age cave bear have been discovered

240

00:12:43,030 --> 00:12:40,880

in the russian arctic the first example

241

00:12:45,670 --> 00:12:43,040

of the species ever to be found with

242

00:12:47,990 --> 00:12:45,680

soft tissues intact

243

00:12:49,829 --> 00:12:48,000

wow the astonishing find was made by

244

00:12:52,710 --> 00:12:49,839

reindeer herders

245

00:12:54,470 --> 00:12:52,720

on the lyakovsky islands which is part

246

00:12:58,230 --> 00:12:54,480

of the new siberian islands

247

00:13:00,949 --> 00:12:58,240

in russia's far north prior to this

248

00:13:01,670 --> 00:13:00,959

only the bones of cave bears have been

249

00:13:05,590 --> 00:13:01,680

unearthed

250

00:13:08,710 --> 00:13:05,600

only the bones but this specimen

251
00:13:11,750 --> 00:13:08,720
even had its nose intact

252
00:13:15,509 --> 00:13:11,760
a whole bare carcass with soft tissues

253
00:13:19,590 --> 00:13:15,519
and all internal organs in place

254
00:13:23,030 --> 00:13:19,600
holy crap that's a find big news day

255
00:13:25,110 --> 00:13:23,040
right well it's followed up with this to

256
00:13:26,790 --> 00:13:25,120
make it even bigger and here's the icing

257
00:13:31,110 --> 00:13:26,800
on the cake

258
00:13:34,230 --> 00:13:31,120
my dvd of the movie communion

259
00:13:37,990 --> 00:13:34,240
is actually scheduled for delivery

260
00:13:40,790 --> 00:13:38,000
tomorrow i'll keep everyone posted and

261
00:13:43,829 --> 00:13:40,800
if it arrives before the show

262
00:13:44,949 --> 00:13:43,839
you'll see it on the bunker cam that's

263
00:13:46,949 --> 00:13:44,959

right

264

00:13:49,189 --> 00:13:46,959

looking forward to that uh there are a

265

00:13:52,550 --> 00:13:49,199

few people uh madeleine ordered one

266

00:13:55,189 --> 00:13:52,560

uh i got email oh man you know this

267

00:13:56,389 --> 00:13:55,199

comedian dvd look it's not streaming

268

00:13:58,150 --> 00:13:56,399

forget about that you're not gonna

269

00:14:00,629 --> 00:13:58,160

stream it unless you're gonna watch

270

00:14:01,990 --> 00:14:00,639

a bootleg version of it on youtube but

271

00:14:02,870 --> 00:14:02,000

it's not streaming on any of the

272

00:14:04,790 --> 00:14:02,880

services

273

00:14:05,990 --> 00:14:04,800

i'm shocked to get this and it says

274

00:14:09,030 --> 00:14:06,000

widescreen

275

00:14:10,550 --> 00:14:09,040

which man if it's four by three by four

276

00:14:11,430 --> 00:14:10,560

whatever four by three i'm gonna be

277

00:14:13,990 --> 00:14:11,440

upset

278

00:14:14,870 --> 00:14:14,000

but it says widescreen okay so i'm

279

00:14:18,069 --> 00:14:14,880

excited

280

00:14:18,470 --> 00:14:18,079

if it actually gets here wow but how

281

00:14:23,269 --> 00:14:18,480

much

282

00:14:27,269 --> 00:14:23,279

email can one person get over a dvd

283

00:14:30,310 --> 00:14:27,279

ah yeah i appreciate it i i really do

284

00:14:30,629 --> 00:14:30,320

and uh so let's see you know how many of

285

00:14:34,550 --> 00:14:30,639

you

286

00:14:36,069 --> 00:14:34,560

madeleine said hers was going to come

287

00:14:37,110 --> 00:14:36,079

today she was going to post a picture of

288

00:14:40,870 --> 00:14:37,120

it in twitter

289

00:14:43,430 --> 00:14:40,880

and i got that email i don't see oh

290

00:14:43,990 --> 00:14:43,440

hold on here it is just came in six

291

00:14:47,750 --> 00:14:44,000

minutes ago

292

00:14:51,189 --> 00:14:47,760

for madeleine the communion has arrived

293

00:14:53,509 --> 00:14:51,199

uh ordered on fader night arrived today

294

00:14:54,230 --> 00:14:53,519

i hope there there it is playing in the

295

00:14:57,350 --> 00:14:54,240

background

296

00:14:59,269 --> 00:14:57,360

fantastic stuff madeleine okay so we

297

00:15:02,550 --> 00:14:59,279

ordered them on the same day

298

00:15:05,829 --> 00:15:02,560

and uh you obviously live one day closer

299

00:15:08,150 --> 00:15:05,839

to the uh distribution center for

300

00:15:08,949 --> 00:15:08,160

for amazon but there it is playing in

301

00:15:12,150 --> 00:15:08,959

the background

302

00:15:14,310 --> 00:15:12,160

look at that all right excited

303

00:15:16,150 --> 00:15:14,320

i'm gonna be watching that tomorrow all

304

00:15:17,990 --> 00:15:16,160

right let's get this show cracking lots

305

00:15:20,069 --> 00:15:18,000

to talk about tonight happy birthday to

306

00:15:27,910 --> 00:15:20,079

today

307

00:15:30,629 --> 00:15:27,920

is 73. jurassic park

308

00:15:33,189 --> 00:15:30,639

dead calm wasn't he in one of those

309

00:15:36,790 --> 00:15:33,199

movies like uh

310

00:15:40,550 --> 00:15:36,800

wasn't he was was he in the abyss

311

00:15:42,790 --> 00:15:40,560

or sphere or one of those undersea

312

00:15:44,870 --> 00:15:42,800

alien wasn't he in one of those two as

313

00:15:48,470 --> 00:15:44,880

well he was great and dead calm

314

00:15:49,430 --> 00:15:48,480

um my my my sam neil jurassic park is

315

00:15:52,230 --> 00:15:49,440

jurassic park

316

00:15:52,870 --> 00:15:52,240

three there were some scenes in jurassic

317

00:15:55,110 --> 00:15:52,880

park three

318

00:15:56,949 --> 00:15:55,120

remember when they were in the uh the

319

00:15:58,310 --> 00:15:56,959

bird part of the island and they had to

320

00:16:02,470 --> 00:15:58,320

go down that tunnel

321

00:16:06,829 --> 00:16:02,480

the the the bird cage that man that was

322

00:16:09,430 --> 00:16:06,839

that was good stuff sam neil today 73

323

00:16:13,030 --> 00:16:09,440

a-ha that's right

324

00:16:16,550 --> 00:16:13,040

aha frontman morton harquette

325

00:16:19,749 --> 00:16:16,560

today is 61 years old

326

00:16:21,590 --> 00:16:19,759

singer of one of the biggest songs in

327

00:16:25,269 --> 00:16:21,600

the history of music

328

00:16:29,590 --> 00:16:25,279

take on me and also today

329

00:16:31,990 --> 00:16:29,600

og fade or not the elf is 29 years old

330

00:16:35,590 --> 00:16:32,000

now i want to show this to everybody

331

00:16:37,509 --> 00:16:35,600

this arrived today and it's elf's

332

00:16:40,790 --> 00:16:37,519

birthday and i get a gift

333

00:16:45,350 --> 00:16:40,800

from him which is strange strange timing

334

00:16:48,870 --> 00:16:45,360

but i got this a hat rack

335

00:16:52,310 --> 00:16:50,949

yeah and it's exactly what you think it

336

00:17:01,910 --> 00:16:52,320

is

337

00:17:05,429 --> 00:17:01,920

burned stained absolutely incredible

338

00:17:08,870 --> 00:17:05,439

uh piece of work and i've been i've been

339

00:17:13,029 --> 00:17:08,880

sent a lot of stuff in my day

340

00:17:15,510 --> 00:17:13,039

um for the bunker but this

341

00:17:16,949 --> 00:17:15,520

is absolutely incredible elf thank you

342

00:17:20,309 --> 00:17:16,959

so much

343

00:17:21,990 --> 00:17:20,319

and uh it's gonna have its own prized

344

00:17:24,230 --> 00:17:22,000

place here in the bunker

345

00:17:25,029 --> 00:17:24,240

and i will oh there's a there's an old

346

00:17:28,309 --> 00:17:25,039

nail there

347

00:17:29,270 --> 00:17:28,319

that's man this is it's just absolutely

348

00:17:31,029 --> 00:17:29,280

incredible

349

00:17:33,110 --> 00:17:31,039

so there you go thank you elf and

350

00:17:36,390 --> 00:17:33,120

there's the close-up of it

351

00:17:41,669 --> 00:17:40,230

absolutely fantastic that's special

352

00:17:44,789 --> 00:17:41,679

right there thank you elf and happy

353

00:17:49,190 --> 00:17:44,799

birthday man 29

354

00:17:52,390 --> 00:17:49,200

29 years old all right where am i at

355

00:17:55,909 --> 00:17:52,400

our dead guy's birthday today is

356

00:17:57,029 --> 00:17:55,919

steve gaines 1949 to 1977 died at the

357

00:18:01,510 --> 00:17:57,039

age of 28 and

358

00:18:03,270 --> 00:18:01,520

ed king 1949 to 2018 died at the age of

359

00:18:06,870 --> 00:18:03,280

68.

360

00:18:10,230 --> 00:18:06,880

both ed and steve were the guitarists

361

00:18:14,150 --> 00:18:10,240

for leonard skynyrd it was

362

00:18:14,470 --> 00:18:14,160

king that wrote sweet home alabama wrote

363

00:18:16,630 --> 00:18:14,480

or

364

00:18:19,270 --> 00:18:16,640

co-wrote poison whiskey saturday night

365

00:18:23,830 --> 00:18:19,280

special in whiskey rockarolla

366

00:18:26,950 --> 00:18:23,840

king left the band in 1975 mid-1975

367

00:18:30,470 --> 00:18:26,960

and was replaced by steve gaines

368

00:18:35,669 --> 00:18:30,480

in 1976 a few months later

369

00:18:38,230 --> 00:18:35,679

steve died in the plane crash in 1977

370

00:18:40,470 --> 00:18:38,240

just over a year after joining leonard

371

00:18:41,990 --> 00:18:40,480

skinner gaines played on just one album

372

00:18:44,950 --> 00:18:42,000

street survivors

373

00:18:47,870 --> 00:18:44,960

that was released just three days before

374

00:18:50,870 --> 00:18:47,880

the plane crash on october 20th

375

00:18:54,549 --> 00:18:50,880

1977. how strange right

376

00:18:56,350 --> 00:18:54,559

irony ironic strange that they both have

377

00:19:00,070 --> 00:18:56,360

the same birthdays

378

00:19:00,470 --> 00:19:00,080

absolutely crazy and uh happy birthday

379

00:19:03,830 --> 00:19:00,480

to

380

00:19:05,750 --> 00:19:03,840

both of you steve and ed wow

381

00:19:08,830 --> 00:19:05,760

incredible all right on this day in

382

00:19:11,270 --> 00:19:08,840

history otd

383

00:19:14,710 --> 00:19:11,280

1959.

384

00:19:16,470 --> 00:19:14,720

it went down a soviet rocket crashes

385

00:19:19,029 --> 00:19:16,480

into the moon's surface

386

00:19:20,870 --> 00:19:19,039

becoming the first man-made object sent

387

00:19:21,990 --> 00:19:20,880

from the earth to reach the lunar

388

00:19:27,110 --> 00:19:22,000

surface

389

00:19:29,510 --> 00:19:27,120

and it carried the soviet flag

390

00:19:32,470 --> 00:19:29,520

yep yep they got there first planted the

391

00:19:34,789 --> 00:19:32,480

flag first well crashed the flag

392

00:19:35,750 --> 00:19:34,799

the united states quickly responded with

393

00:19:39,190 --> 00:19:35,760

a ah

394

00:19:43,029 --> 00:19:39,200

that don't count that don't count

395

00:19:49,669 --> 00:19:46,549

you got to plant unfurl you got to plant

396

00:19:53,350 --> 00:19:49,679

the flag fader fact

397

00:19:56,710 --> 00:19:53,360

all right man i love doing these

398

00:19:59,029 --> 00:19:56,720

you ready fader fact

399

00:20:01,110 --> 00:19:59,039

it if you live in utah i want you to

400

00:20:04,470 --> 00:20:01,120

confirm this for me

401
00:20:10,470 --> 00:20:04,480
i want you to

402
00:20:12,149 --> 00:20:10,480
and confirm this fader fact are you

403
00:20:15,909 --> 00:20:12,159
ready

404
00:20:16,950 --> 00:20:15,919
the owner and only resident of the ghost

405
00:20:20,789 --> 00:20:16,960
town

406
00:20:24,789 --> 00:20:20,799
loosen utah that's l-u-c-i-n

407
00:20:29,750 --> 00:20:24,799
lucen utah is ivo

408
00:20:33,270 --> 00:20:29,760
zadarski who at the age of 24

409
00:20:36,310 --> 00:20:33,280
he was the guy he was the kid that flew

410
00:20:37,669 --> 00:20:36,320
over the iron curtain in 1984 using his

411
00:20:41,590 --> 00:20:37,679
homemade glider

412
00:20:44,390 --> 00:20:41,600
powered with a 600cc trobon engine

413
00:20:45,270 --> 00:20:44,400

and landed undetected at vienna

414

00:20:49,190 --> 00:20:45,280

international

415

00:20:52,310 --> 00:20:49,200

airport and escaped to the west

416

00:20:55,430 --> 00:20:52,320

and he went all the way west

417

00:20:55,830 --> 00:20:55,440

to utah now he hangs out in this ghost

418

00:20:59,350 --> 00:20:55,840

town

419

00:21:01,909 --> 00:20:59,360

right he owns it he owns it he bought it

420

00:21:03,990 --> 00:21:01,919

and he builds these crazy planes and

421

00:21:06,390 --> 00:21:04,000

test flies them there and

422

00:21:07,830 --> 00:21:06,400

and sometimes throws a party or two how

423

00:21:10,470 --> 00:21:07,840

crazy is that

424

00:21:12,070 --> 00:21:10,480

that is your fader fact tonight deep

425

00:21:14,870 --> 00:21:12,080

prasad joins us

426
00:21:17,669 --> 00:21:14,880
for a discussion about the study of et

427
00:21:19,590 --> 00:21:17,679
and ufos with modern physics and science

428
00:21:21,270 --> 00:21:19,600
tomorrow night jay widener is here for

429
00:21:23,590 --> 00:21:21,280
the life of terence mckenna

430
00:21:25,190 --> 00:21:23,600
wednesday night carol and ford and

431
00:21:27,190 --> 00:21:25,200
crystal skulls

432
00:21:28,870 --> 00:21:27,200
thursday night another fader night with

433
00:21:31,110 --> 00:21:28,880
open lines all night long it's a perfect

434
00:21:34,789 --> 00:21:31,120
week here on fade to black

435
00:21:36,149 --> 00:21:34,799
wow all right now

436
00:21:37,590 --> 00:21:36,159
time for me to hit this river moon

437
00:21:38,630 --> 00:21:37,600
coffee you better be drinking yours

438
00:21:40,950 --> 00:21:38,640

you're gonna need it

439

00:21:42,830 --> 00:21:40,960

after what you have do after you hear

440

00:21:46,149 --> 00:21:42,840

what i have to say

441

00:21:52,630 --> 00:21:49,590

happy birthday elf so elf is uh so i i

442

00:21:56,870 --> 00:21:52,640

guess elf's birthday

443

00:21:58,870 --> 00:21:56,880

is frozen oreo cookies and milk

444

00:22:00,630 --> 00:21:58,880

and uh do you still light a candle

445

00:22:01,110 --> 00:22:00,640

though with that you could probably get

446

00:22:07,669 --> 00:22:01,120

the

447

00:22:10,789 --> 00:22:07,679

right if you don't you probably get it

448

00:22:13,990 --> 00:22:10,799

right get a birthday candle in there

449

00:22:19,110 --> 00:22:14,000

like that sucker up all right river moon

450

00:22:25,510 --> 00:22:22,950

promo code f2b

451
00:22:29,430 --> 00:22:25,520
blend gets you 50 off of your order

452
00:22:29,440 --> 00:22:34,630
man good coffee

453
00:22:41,270 --> 00:22:38,149
got coffee went down the wrong pipe

454
00:22:44,390 --> 00:22:41,280
all right here we go i have been

455
00:22:47,029 --> 00:22:44,400
sounding the alarm about

456
00:22:48,470 --> 00:22:47,039
fake news social media and its effects

457
00:22:51,909 --> 00:22:48,480
on the world for over

458
00:22:56,470 --> 00:22:54,870
when i first started to speak out about

459
00:23:04,549 --> 00:22:56,480
it

460
00:23:04,870 --> 00:23:04,559
specialists or reporting that was going

461
00:23:07,990 --> 00:23:04,880
on

462
00:23:10,549 --> 00:23:08,000
about it in the media oh no no i saw the

463
00:23:12,070 --> 00:23:10,559

signs first in fact it was the exact

464

00:23:15,270 --> 00:23:12,080

opposite

465

00:23:15,710 --> 00:23:15,280

everything i spoke about was based on my

466

00:23:17,909 --> 00:23:15,720

own

467

00:23:19,029 --> 00:23:17,919

experiences and that's what you want to

468

00:23:22,230 --> 00:23:19,039

know

469

00:23:25,669 --> 00:23:22,240

what i was seeing and reading in real

470

00:23:34,070 --> 00:23:29,110

myself like others my

471

00:23:36,710 --> 00:23:34,080

own age many others my own age

472

00:23:39,990 --> 00:23:36,720

have a very unique perspective on the

473

00:23:43,590 --> 00:23:40,000

changes we are seeing today

474

00:23:44,789 --> 00:23:43,600

because i grew up before the internet

475

00:23:48,390 --> 00:23:44,799

age

476

00:23:51,190 --> 00:23:48,400

stay with me i was just 30 years old

477

00:23:54,230 --> 00:23:51,200

when the world started to change

478

00:23:56,070 --> 00:23:54,240

and that is an age you know

479

00:23:58,149 --> 00:23:56,080

30 years old more on that in just a

480

00:24:01,590 --> 00:23:58,159

minute stay right there

481

00:24:04,870 --> 00:24:01,600

that is an age where you are both

482

00:24:08,070 --> 00:24:04,880

an adult and you think that

483

00:24:10,470 --> 00:24:08,080

you are aware and you think that you

484

00:24:12,630 --> 00:24:10,480

understand the world around you and now

485

00:24:15,190 --> 00:24:12,640

you understand the future

486

00:24:16,870 --> 00:24:15,200

that's what 30 years old is it's not 21

487

00:24:20,470 --> 00:24:16,880

it's not 15 and it's not

488

00:24:22,789 --> 00:24:20,480

50. 30 is unique

489

00:24:24,310 --> 00:24:22,799

really is start to get your feet on the

490

00:24:29,510 --> 00:24:24,320

ground for real

491

00:24:32,710 --> 00:24:29,520

but then and that was 1990 91 92 93

492

00:24:34,070 --> 00:24:32,720

the next 15 years after that would be

493

00:24:38,710 --> 00:24:34,080

the most insane

494

00:24:42,149 --> 00:24:38,720

period in human history that's right

495

00:24:45,590 --> 00:24:42,159

and here is the really crazy part

496

00:24:49,190 --> 00:24:45,600

right now on this planet we have

497

00:24:52,549 --> 00:24:49,200

30 year olds 30 year olds

498

00:24:53,830 --> 00:24:52,559

right now same age as i was then 30 year

499

00:24:57,110 --> 00:24:53,840

olds today

500

00:25:00,870 --> 00:24:57,120

who have experienced nothing

501
00:25:04,070 --> 00:25:00,880
but the internet age they have nothing

502
00:25:04,080 --> 00:25:07,750
this is their life

503
00:25:07,760 --> 00:25:12,149
they know nothing else

504
00:25:21,830 --> 00:25:18,149
this is a very very scary situation

505
00:25:24,470 --> 00:25:21,840
take a time right now to absorb these

506
00:25:28,230 --> 00:25:27,110
because today we are at the tipping

507
00:25:34,149 --> 00:25:28,240
point

508
00:25:36,230 --> 00:25:34,159
the significance of this cannot be

509
00:25:39,510 --> 00:25:36,240
measured

510
00:25:40,549 --> 00:25:39,520
it's it it's as simple as this the

511
00:25:43,669 --> 00:25:40,559
generation

512
00:25:47,269 --> 00:25:43,679
born after 1990 just

513
00:25:48,149 --> 00:25:47,279

30 short years ago lives their life

514

00:25:52,390 --> 00:25:48,159

today

515

00:25:55,430 --> 00:25:52,400

on social media and the internet

516

00:25:59,830 --> 00:25:55,440

their entire world is based on likes

517

00:26:03,029 --> 00:25:59,840

subs videos and comments both theirs

518

00:26:10,149 --> 00:26:06,789

their friends their family

519

00:26:12,789 --> 00:26:10,159

it's their news it's their entertainment

520

00:26:14,390 --> 00:26:12,799

it's the comments and lives of

521

00:26:17,510 --> 00:26:14,400

celebrities

522

00:26:17,520 --> 00:26:22,789

right here

523

00:26:25,830 --> 00:26:25,269

it's a world completely tailored for

524

00:26:28,630 --> 00:26:25,840

them

525

00:26:29,590 --> 00:26:28,640

their social media persona is custom

526
00:26:32,310 --> 00:26:29,600
made

527
00:26:32,950 --> 00:26:32,320
their news and youtube feed is unique to

528
00:26:35,669 --> 00:26:32,960
them

529
00:26:36,470 --> 00:26:35,679
their world is singular and nobody else

530
00:26:39,430 --> 00:26:36,480
has it

531
00:26:41,830 --> 00:26:39,440
they believe the real world is the one

532
00:26:45,230 --> 00:26:41,840
that is created for them

533
00:26:48,920 --> 00:26:45,240
by wait for it

534
00:26:55,430 --> 00:26:50,830
[Music]

535
00:27:02,789 --> 00:26:59,350
code with no regulations

536
00:27:07,590 --> 00:27:02,799
code with no laws

537
00:27:10,950 --> 00:27:07,600
code with no oversight

538
00:27:12,390 --> 00:27:10,960

today when we see protests in the

539

00:27:15,350 --> 00:27:12,400

streets

540

00:27:16,549 --> 00:27:15,360

young content creators live streaming in

541

00:27:19,750 --> 00:27:16,559

anger

542

00:27:22,070 --> 00:27:19,760

former friends battling it out on a

543

00:27:24,710 --> 00:27:22,080

facebook thread

544

00:27:27,269 --> 00:27:24,720

all of this is created by social media

545

00:27:29,269 --> 00:27:27,279

and it's total control of the minds of

546

00:27:31,990 --> 00:27:29,279

an entire generation

547

00:27:33,590 --> 00:27:32,000

and they don't know any different this

548

00:27:36,789 --> 00:27:33,600

is how the world

549

00:27:43,430 --> 00:27:36,799

is to them and remember

550

00:27:47,190 --> 00:27:44,950

when you see someone on facebook

551
00:27:50,310 --> 00:27:47,200
complaining angry

552
00:27:51,029 --> 00:27:50,320
and outright hostile over the left over

553
00:27:53,830 --> 00:27:51,039
the right

554
00:27:54,950 --> 00:27:53,840
over religion schools coronavirus or

555
00:27:59,350 --> 00:27:54,960
virtually anything

556
00:28:02,630 --> 00:27:59,360
it could be knitting and crocheting

557
00:28:05,990 --> 00:28:02,640
you need to remember that they

558
00:28:08,870 --> 00:28:06,000
are getting a world fed to them

559
00:28:09,909 --> 00:28:08,880
in their news feed that is totally

560
00:28:13,029 --> 00:28:09,919
different

561
00:28:17,029 --> 00:28:14,470
you've heard it so many times before

562
00:28:20,630 --> 00:28:17,039
it's like dude did you hear about

563
00:28:25,909 --> 00:28:20,640

blah blah blah and your answer is no

564

00:28:28,630 --> 00:28:25,919

i didn't hear that because you haven't

565

00:28:31,190 --> 00:28:28,640

you know nothing about it your friend

566

00:28:34,789 --> 00:28:31,200

doesn't understand that you don't know

567

00:28:36,149 --> 00:28:34,799

because their entire news feed is filled

568

00:28:42,149 --> 00:28:36,159

with nothing but

569

00:28:46,070 --> 00:28:42,159

xyz your feed is the exact opposite

570

00:28:48,070 --> 00:28:46,080

you're getting abc

571

00:28:49,430 --> 00:28:48,080

you have a completely different view of

572

00:28:53,029 --> 00:28:49,440

the world in fact

573

00:28:57,190 --> 00:28:53,039

everyone has their own planet earth

574

00:28:59,269 --> 00:28:57,200

and this is the problem in my opinion

575

00:29:01,190 --> 00:28:59,279

and i've stated this many times in the

576

00:29:03,750 --> 00:29:01,200

past google

577

00:29:05,029 --> 00:29:03,760

all of social media and the internet in

578

00:29:08,950 --> 00:29:05,039

general

579

00:29:11,029 --> 00:29:08,960

should have been left alone

580

00:29:13,430 --> 00:29:11,039

once facebook youtube and google started

581

00:29:14,870 --> 00:29:13,440

to use targeted advertising to chase

582

00:29:18,389 --> 00:29:14,880

down bigger profits

583

00:29:20,070 --> 00:29:18,399

things changed the automated algorithms

584

00:29:22,389 --> 00:29:20,080

altered the landscape

585

00:29:24,310 --> 00:29:22,399

and most of this code is actually quite

586

00:29:28,149 --> 00:29:24,320

simple and runs all by

587

00:29:30,789 --> 00:29:28,159

itself 24 7 laser focused at

588

00:29:31,269 --> 00:29:30,799

each individual user of the internet

589

00:29:36,870 --> 00:29:31,279

without

590

00:29:37,909 --> 00:29:36,880

originally spawned for advertising

591

00:29:40,950 --> 00:29:37,919

dollars

592

00:29:44,070 --> 00:29:40,960

but today it's the creator

593

00:29:46,149 --> 00:29:44,080

of worlds so

594

00:29:48,389 --> 00:29:46,159

when you wonder why nobody understands

595

00:29:51,110 --> 00:29:48,399

you and you think that everyone else

596

00:29:52,710 --> 00:29:51,120

but you was trying to destroy the world

597

00:29:55,909 --> 00:29:52,720

for no reason

598

00:29:58,710 --> 00:29:55,919

because they are crazy well just think

599

00:30:01,029 --> 00:29:58,720

about your news feed

600

00:30:03,750 --> 00:30:01,039

because they are thinking the same thing

601
00:30:07,350 --> 00:30:03,760
about you

602
00:30:10,070 --> 00:30:07,360
it's not them it's not you

603
00:30:11,990 --> 00:30:10,080
it's an algorithm messing with your

604
00:30:15,269 --> 00:30:12,000
heads

605
00:30:15,590 --> 00:30:15,279
now although i've been thinking writing

606
00:30:18,230 --> 00:30:15,600
and

607
00:30:20,470 --> 00:30:18,240
speaking about this for a very long time

608
00:30:22,070 --> 00:30:20,480
and we've even covered it recently on

609
00:30:24,950 --> 00:30:22,080
the h factor

610
00:30:27,190 --> 00:30:24,960
there's a new documentary out right now

611
00:30:27,830 --> 00:30:27,200
that spells it out all for you it's

612
00:30:31,029 --> 00:30:27,840
called

613
00:30:32,149 --> 00:30:31,039

the social dilemma this documentary

614

00:30:34,230 --> 00:30:32,159

drama hybrid

615

00:30:35,669 --> 00:30:34,240

explores the dangerous human impact of

616

00:30:38,149 --> 00:30:35,679

social networking

617

00:30:40,950 --> 00:30:38,159

with the tech experts from facebook

618

00:30:44,070 --> 00:30:40,960

google apple twitter youtube and others

619

00:30:46,870 --> 00:30:44,080

warning you about the things

620

00:30:48,830 --> 00:30:46,880

that they have created the social

621

00:30:51,110 --> 00:30:48,840

dilemma is currently streaming on

622

00:30:52,789 --> 00:30:51,120

netflix and i don't know how you're

623

00:30:55,350 --> 00:30:52,799

gonna react to this film

624

00:30:57,430 --> 00:30:55,360

but i can assure you of this you'll

625

00:31:00,389 --> 00:30:57,440

think twice about checking your news

626

00:31:03,990 --> 00:31:00,399

feed every five minutes of your day

627

00:31:05,990 --> 00:31:04,000

i guarantee it seriously

628

00:31:07,909 --> 00:31:06,000

this is fade to black i am your host

629

00:31:10,389 --> 00:31:07,919

jimmy church tonight

630

00:31:12,710 --> 00:31:10,399

deep prasad joins us for a discussion

631

00:31:15,669 --> 00:31:12,720

about the study of et and ufos

632

00:31:18,630 --> 00:31:15,679

with modern physics and science tomorrow

633

00:31:20,630 --> 00:31:18,640

night jay weidner is here that's right

634

00:31:21,830 --> 00:31:20,640

wednesday night carolyn ford crystal

635

00:31:23,909 --> 00:31:21,840

skulls

636

00:31:25,590 --> 00:31:23,919

thursday night is fader night you can

637

00:31:28,789 --> 00:31:25,600

follow me on twitter right now at

638

00:31:31,269 --> 00:31:28,799

j church radio on the game changer

639

00:31:32,710 --> 00:31:31,279

network and kgra the planet

640

00:31:35,750 --> 00:31:32,720

i'll be right back after this short

641

00:31:51,910 --> 00:31:35,760

break with our guest deep prasad

642

00:32:02,070 --> 00:31:58,870

[Music]

643

00:32:04,070 --> 00:32:02,080

it this is nicole church

644

00:32:06,110 --> 00:32:04,080

daughter of you know who and you're

645

00:32:07,750 --> 00:32:06,120

listening to fade to black on

646

00:32:11,509 --> 00:32:07,760

jimmychurchradio.com and the game

647

00:32:17,990 --> 00:32:13,830

you're listening to jimmy church fade to

648

00:32:21,190 --> 00:32:20,230

fate to black will now pause for alien

649

00:32:22,549 --> 00:32:21,200

identification

650

00:32:26,830 --> 00:32:22,559

[Music]

651
00:32:29,509 --> 00:32:26,840
the station ktra

652
00:32:31,750 --> 00:32:29,519
radio

653
00:32:33,669 --> 00:32:31,760
introducing the game changer blend from

654
00:32:36,070 --> 00:32:33,679
river moon coffee that delivers a

655
00:32:38,470 --> 00:32:36,080
customized blend made specifically

656
00:32:39,269 --> 00:32:38,480
for the fader knots if the game is

657
00:32:42,230 --> 00:32:39,279
rigged

658
00:32:43,350 --> 00:32:42,240
change the game it's a boulder cup with

659
00:32:45,669 --> 00:32:43,360
some bite

660
00:32:47,909 --> 00:32:45,679
game changer is the coffee of choice for

661
00:32:49,029 --> 00:32:47,919
those that prefer an organic dark roast

662
00:32:52,549 --> 00:32:49,039
that is slightly

663
00:32:55,110 --> 00:32:52,559

lighter and milder but it's still dark

664

00:32:55,990 --> 00:32:55,120

with wild notes of pecans and chocolate

665

00:32:58,549 --> 00:32:56,000

with a rich

666

00:33:00,630 --> 00:32:58,559

balanced full-bodied cup that is roasted

667

00:33:01,830 --> 00:33:00,640

to perfection for a great coffee to

668

00:33:04,870 --> 00:33:01,840

start your day

669

00:33:05,750 --> 00:33:04,880

as an after dinner coffee or anywhere in

670

00:33:07,750 --> 00:33:05,760

between

671

00:33:10,710 --> 00:33:07,760

artisan small batch roasted to

672

00:33:13,110 --> 00:33:10,720

perfection usda certified organic all

673

00:33:15,870 --> 00:33:13,120

river moon coffee is freshly roasted

674

00:33:17,509 --> 00:33:15,880

and packaged in the usa just go to

675

00:33:19,669 --> 00:33:17,519

rivermooncoffee.com or click on the

676
00:33:20,389 --> 00:33:19,679
banners over on our site and use the

677
00:33:26,110 --> 00:33:20,399
promo code

678
00:33:30,149 --> 00:33:26,120
f2b blend for 15 off of your order today

679
00:33:40,470 --> 00:33:30,159
rivermooncoffee.com go back lee tappy

680
00:33:44,549 --> 00:33:42,149
this is jimmy church of fade to black

681
00:33:47,190 --> 00:33:44,559
and you can get our podcast for just

682
00:33:49,269 --> 00:33:47,200
two dollars per month all you have to do

683
00:33:52,870 --> 00:33:49,279
is click on the podcast banner

684
00:33:55,509 --> 00:33:52,880
over at jimmychurchradio.com

685
00:33:56,870 --> 00:33:55,519
hi folks it's trembling times and fear

686
00:33:59,110 --> 00:33:56,880
is pushing emotions

687
00:34:00,789 --> 00:33:59,120
which in turn pushes health the wrong

688
00:34:01,830 --> 00:34:00,799

direction do you ever get an egg because

689

00:34:04,310 --> 00:34:01,840

life is uneasy

690

00:34:06,070 --> 00:34:04,320

try life change tea at [get the tea.com](http://getthetea.com)

691

00:34:06,470 --> 00:34:06,080

life change tea works on your digestive

692

00:34:08,550 --> 00:34:06,480

tract

693

00:34:11,030 --> 00:34:08,560

helping to move food through quicker and

694

00:34:12,869 --> 00:34:11,040

comfortably so your health is spot on

695

00:34:14,869 --> 00:34:12,879

life change tea may not help with world

696

00:34:16,310 --> 00:34:14,879

issues but it will help with your

697

00:34:18,310 --> 00:34:16,320

digestive issues

698

00:34:19,990 --> 00:34:18,320

a glass a day helps keep the intruders

699

00:34:22,349 --> 00:34:20,000

away so

700

00:34:25,589 --> 00:34:22,359

change your life today log on to

701
00:34:27,990 --> 00:34:25,599
getthet.com that's get the tea.com

702
00:34:29,510 --> 00:34:28,000
if your health game is off get on by

703
00:34:31,909 --> 00:34:29,520
ordering life change tea

704
00:34:33,589 --> 00:34:31,919
get the tea.com and while you're on our

705
00:34:35,750 --> 00:34:33,599
site look around at the great

706
00:34:36,950 --> 00:34:35,760
non-gmo organic supplements and if

707
00:34:39,349 --> 00:34:36,960
you're a sales shopper

708
00:34:40,149 --> 00:34:39,359
go to our specials page and see what's

709
00:34:41,829 --> 00:34:40,159
for you

710
00:34:43,349 --> 00:34:41,839
i've been drinking the tea for 12 years

711
00:34:44,310 --> 00:34:43,359
and i'm sure glad for its health

712
00:34:49,270 --> 00:34:44,320
benefits

713
00:34:52,950 --> 00:34:52,629

the tea that makes you go nine out of

714

00:34:56,950 --> 00:34:52,960

ten

715

00:35:04,390 --> 00:35:00,710

fade to black is not

716

00:35:05,990 --> 00:35:04,400

your father's radio show on the game

717

00:35:10,630 --> 00:35:06,000

changer radio network

718

00:35:12,630 --> 00:35:10,640

and kgra the planet

719

00:35:17,190 --> 00:35:12,640

hi this is rob reiner from anvil and

720

00:35:20,150 --> 00:35:17,200

you're listening to jimmychurchradio.com

721

00:35:30,380 --> 00:35:20,160

what's up i'm chris what up this is

722

00:35:38,230 --> 00:35:30,390

jimmy church radio

723

00:35:41,990 --> 00:35:40,310

all right welcome back fade to black i'm

724

00:35:44,390 --> 00:35:42,000

your host jimmy church

725

00:35:46,150 --> 00:35:44,400

what a great week on fade to black this

726

00:35:49,670 --> 00:35:46,160

week tonight d prasad of course

727

00:35:51,829 --> 00:35:49,680

is here tomorrow night jay widener

728

00:35:54,310 --> 00:35:51,839

the life and times of terence mckenna

729

00:35:56,710 --> 00:35:54,320

wednesday night carolyn ford

730

00:35:57,990 --> 00:35:56,720

man crystal skulls what a great week and

731

00:36:00,230 --> 00:35:58,000

then thursday night of course

732

00:36:02,150 --> 00:36:00,240

is fader night with open lines all night

733

00:36:05,670 --> 00:36:02,160

long tonight it's all about deep

734

00:36:07,270 --> 00:36:05,680

deep prasad the ceo of reactive q

735

00:36:09,430 --> 00:36:07,280

is one of the great young minds in

736

00:36:10,310 --> 00:36:09,440

science and also offers a professional

737

00:36:15,750 --> 00:36:10,320

perspe

738

00:36:18,069 --> 00:36:15,760

that's right tonight we're going to

739

00:36:19,750 --> 00:36:18,079

discuss ufo research and how to apply

740

00:36:23,030 --> 00:36:19,760

modern science and physics

741

00:36:24,470 --> 00:36:23,040

to the known and unknown data that's my

742

00:36:26,150 --> 00:36:24,480

favorite subject

743

00:36:27,430 --> 00:36:26,160

deep and his company are aiming to

744

00:36:28,230 --> 00:36:27,440

create the world's first quantum

745

00:36:29,670 --> 00:36:28,240

computer

746

00:36:31,990 --> 00:36:29,680

as well as work on producing

747

00:36:34,950 --> 00:36:32,000

superconductors and meta materials

748

00:36:35,589 --> 00:36:34,960

prasad is also an avid ufo advocate and

749

00:36:37,510 --> 00:36:35,599

tonight

750

00:36:38,870 --> 00:36:37,520

we're going to discuss all of it we're

751

00:36:42,310 --> 00:36:38,880

going to go et

752

00:36:44,230 --> 00:36:42,320

ufo research and study groups part of

753

00:36:46,150 --> 00:36:44,240

reactive q's mission statement is that

754

00:36:49,430 --> 00:36:46,160

they are actively engaged with

755

00:36:51,670 --> 00:36:49,440

engineers to validate

756

00:36:52,630 --> 00:36:51,680

the solution what does that mean

757

00:36:55,270 --> 00:36:52,640

reactive

758

00:36:57,030 --> 00:36:55,280

q dot io's the website and the links are

759

00:36:58,310 --> 00:36:57,040

over at jimmychurchradio.com i'd like to

760

00:36:59,190 --> 00:36:58,320

welcome back to fade to black the one

761

00:37:01,750 --> 00:36:59,200

and only

762

00:37:03,109 --> 00:37:01,760

deep prasad deep good evening man how

763

00:37:05,670 --> 00:37:03,119

are you

764

00:37:07,910 --> 00:37:05,680

uh really good jimmy thanks for asking

765

00:37:08,230 --> 00:37:07,920

you know it's been a very productive day

766

00:37:09,829 --> 00:37:08,240

uh

767

00:37:12,150 --> 00:37:09,839

and any day that's productive day is a

768

00:37:12,470 --> 00:37:12,160

good day and any day that we're alive

769

00:37:16,230 --> 00:37:12,480

and

770

00:37:20,150 --> 00:37:16,240

our existence is an even better day

771

00:37:22,630 --> 00:37:20,160

so um uh yeah that being said

772

00:37:23,190 --> 00:37:22,640

uh you know i've been really elated

773

00:37:25,910 --> 00:37:23,200

about

774

00:37:26,630 --> 00:37:25,920

the news that was published today that

775

00:37:28,630 --> 00:37:26,640

many of us

776

00:37:30,550 --> 00:37:28,640

you know kind of saw coming you know on

777

00:37:33,589 --> 00:37:30,560

ufo twitter uh regarding the

778

00:37:34,950 --> 00:37:33,599

venus announcement uh and the phosphene

779

00:37:37,190 --> 00:37:34,960

so you know i was reading through some

780

00:37:38,790 --> 00:37:37,200

of the papers uh

781

00:37:40,550 --> 00:37:38,800

starting from of course the paper that

782

00:37:43,670 --> 00:37:40,560

they made accessible today

783

00:37:45,829 --> 00:37:43,680

um as well as some of the papers that

784

00:37:46,710 --> 00:37:45,839

the lead scientists had published as

785

00:37:48,950 --> 00:37:46,720

part of their

786

00:37:49,829 --> 00:37:48,960

phd thesis it's interesting all of their

787

00:37:52,870 --> 00:37:49,839

stuff

788

00:37:54,230 --> 00:37:52,880

comes together these individuals the

789

00:37:57,270 --> 00:37:54,240

scientists involved

790

00:38:00,310 --> 00:37:57,280

have been working on this uh

791

00:38:03,510 --> 00:38:00,320

you know study of phosphine uh

792

00:38:06,790 --> 00:38:03,520

in the atmosphere of venus for

793

00:38:08,710 --> 00:38:06,800

uh several years right um and and

794

00:38:09,910 --> 00:38:08,720

i think the beautiful thing that we're

795

00:38:13,910 --> 00:38:09,920

seeing here is a

796

00:38:15,990 --> 00:38:13,920

very clear-cut analogy to how disclosure

797

00:38:17,510 --> 00:38:16,000

on at the scientific scale is going to

798

00:38:19,589 --> 00:38:17,520

look like where

799

00:38:21,510 --> 00:38:19,599

you know we have this sort of twilight

800

00:38:23,990 --> 00:38:21,520

zone right of people

801
00:38:25,829 --> 00:38:24,000
who are saying you know there's this

802
00:38:26,870 --> 00:38:25,839
plausible deniability at the moment

803
00:38:29,910 --> 00:38:26,880
regarding

804
00:38:32,710 --> 00:38:29,920
uh the results where people can believe

805
00:38:33,670 --> 00:38:32,720
that it is either due to an unknown

806
00:38:35,990 --> 00:38:33,680
chemistry

807
00:38:37,270 --> 00:38:36,000
uh process that we have not understood

808
00:38:40,310 --> 00:38:37,280
or discovered yet

809
00:38:42,470 --> 00:38:40,320
or it is a bio signature of

810
00:38:46,390 --> 00:38:42,480
extraterrestrial life

811
00:38:50,150 --> 00:38:46,400
and in either case you know we have

812
00:38:52,550 --> 00:38:50,160
uh almost like a tiebreaker that we need

813
00:38:53,190 --> 00:38:52,560

uh and that tiebreaker is gathering the

814

00:38:57,990 --> 00:38:53,200

actual

815

00:39:00,069 --> 00:38:58,000

you know microbes in a petri dish

816

00:39:01,829 --> 00:39:00,079

that is the last step that's remaining

817

00:39:04,230 --> 00:39:01,839

so with disclosure

818

00:39:04,870 --> 00:39:04,240

we're kind of there too with uaps you

819

00:39:07,990 --> 00:39:04,880

know

820

00:39:10,710 --> 00:39:08,000

where we're one sort of amazing uh

821

00:39:11,349 --> 00:39:10,720

scientific international study way from

822

00:39:13,990 --> 00:39:11,359

proving that

823

00:39:14,950 --> 00:39:14,000

uaps are scientifically real and not a

824

00:39:17,270 --> 00:39:14,960

terrestrial

825

00:39:18,870 --> 00:39:17,280

or any at least known source and then

826

00:39:19,430 --> 00:39:18,880

we're going to have to do the same thing

827

00:39:21,349 --> 00:39:19,440

too

828

00:39:22,870 --> 00:39:21,359

uh as the guys who want to go to venus

829

00:39:23,670 --> 00:39:22,880

when it comes to proving aliens does

830

00:39:28,310 --> 00:39:23,680

that make sense

831

00:39:32,230 --> 00:39:28,320

it does it does and i'm going with uh

832

00:39:35,750 --> 00:39:32,240

uh i like the new uao

833

00:39:38,950 --> 00:39:35,760

we want ufo to uap and now

834

00:39:43,190 --> 00:39:38,960

uao i'm digging the uao which is

835

00:39:44,790 --> 00:39:43,200

unidentified aerial object got it

836

00:39:46,310 --> 00:39:44,800

i thought you're gonna say organism

837

00:39:49,510 --> 00:39:46,320

because of the venus thing but

838

00:39:49,829 --> 00:39:49,520

yeah right right now okay now check this

839

00:39:53,589 --> 00:39:49,839

out

840

00:39:55,270 --> 00:39:53,599

i love the word irony

841

00:39:57,430 --> 00:39:55,280

for a lot of different reasons but you

842

00:40:01,430 --> 00:39:57,440

can apply it all over the place

843

00:40:05,109 --> 00:40:01,440

and is this is exciting news today from

844

00:40:07,510 --> 00:40:05,119

uh uh venus for a lot of reasons

845

00:40:08,390 --> 00:40:07,520

but i'm gonna get to the irony part in a

846

00:40:11,990 --> 00:40:08,400

second

847

00:40:13,109 --> 00:40:12,000

but here we have uh the possibility of

848

00:40:15,589 --> 00:40:13,119

life on mars

849

00:40:16,390 --> 00:40:15,599

is probably there right now it's it's

850

00:40:19,510 --> 00:40:16,400

not that

851
00:40:20,069 --> 00:40:19,520
hostile of an environment right now we

852
00:40:23,430 --> 00:40:20,079
have

853
00:40:28,069 --> 00:40:23,440
venus and venus

854
00:40:31,109 --> 00:40:28,079
by all accounts just a billion years ago

855
00:40:32,870 --> 00:40:31,119
was like hawaii right lush planet

856
00:40:34,710 --> 00:40:32,880
great things were going on and we kind

857
00:40:35,910 --> 00:40:34,720
of always knew that about venus but the

858
00:40:38,309 --> 00:40:35,920
thing is this

859
00:40:39,589 --> 00:40:38,319
it's 800 degrees on the surface now you

860
00:40:42,950 --> 00:40:39,599
land you melt

861
00:40:44,630 --> 00:40:42,960
no matter what it is but the thing is

862
00:40:46,630 --> 00:40:44,640
here we have in our own solar system

863
00:40:48,710 --> 00:40:46,640

when we're questioning

864

00:40:49,990 --> 00:40:48,720

you know life out there in the galaxy in

865

00:40:51,109 --> 00:40:50,000

in the milky way or throughout the

866

00:40:54,630 --> 00:40:51,119

universe

867

00:40:57,270 --> 00:40:54,640

that the two closest planets to us

868

00:40:58,309 --> 00:40:57,280

life right and that that's what i think

869

00:41:01,190 --> 00:40:58,319

is great news but

870

00:41:03,030 --> 00:41:01,200

let me get to the irony part sure

871

00:41:06,069 --> 00:41:03,040

phosphine

872

00:41:08,470 --> 00:41:06,079

you know what it really is

873

00:41:10,069 --> 00:41:08,480

you mean like the chemical composition

874

00:41:11,270 --> 00:41:10,079

like in terms of the fact this

875

00:41:14,309 --> 00:41:11,280

phosphorus and three

876

00:41:15,990 --> 00:41:14,319

like hydrogen atoms or okay

877

00:41:20,230 --> 00:41:16,000

this is where you got to take your geek

878

00:41:23,510 --> 00:41:20,240

hat off

879

00:41:26,470 --> 00:41:23,520

phosphine is swamp gas

880

00:41:28,309 --> 00:41:26,480

oh oh yeah that's hilarious isn't that

881

00:41:29,990 --> 00:41:28,319

hilarious i mean that is super

882

00:41:32,870 --> 00:41:30,000

synchronistic

883

00:41:35,270 --> 00:41:32,880

almost at a fishy level i am wondering

884

00:41:38,470 --> 00:41:35,280

about that that is strange

885

00:41:40,870 --> 00:41:38,480

that is the trippiest of all

886

00:41:42,790 --> 00:41:40,880

and uh now that i've let everybody know

887

00:41:45,109 --> 00:41:42,800

really what we're talking about here

888

00:41:46,870 --> 00:41:45,119

uh whenever we talk about venus or

889

00:41:47,990 --> 00:41:46,880

phosphine in the future we're all gonna

890

00:41:51,270 --> 00:41:48,000

snicker just a little

891

00:41:52,390 --> 00:41:51,280

bit because of the irony there of of

892

00:41:55,030 --> 00:41:52,400

this discovery

893

00:41:56,550 --> 00:41:55,040

but yeah very exciting day no doubt

894

00:41:57,910 --> 00:41:56,560

about it and of course the news out of

895

00:42:00,309 --> 00:41:57,920

japan

896

00:42:01,589 --> 00:42:00,319

all right looks like uh they've got a

897

00:42:04,710 --> 00:42:01,599

new directorate

898

00:42:08,390 --> 00:42:04,720

to the uh the japanese defense forces

899

00:42:11,589 --> 00:42:08,400

and uh that they are going to be

900

00:42:15,109 --> 00:42:11,599

reporting any uaos

901
00:42:15,750 --> 00:42:15,119
unidentified aerial objects and they are

902
00:42:18,630 --> 00:42:15,760
going to

903
00:42:19,829 --> 00:42:18,640
include in in the reports in the

904
00:42:23,190 --> 00:42:19,839
research

905
00:42:26,230 --> 00:42:23,200
and the investigation civilian

906
00:42:30,069 --> 00:42:26,240
reports from the public now that's

907
00:42:32,550 --> 00:42:30,079
pretty interesting that is uh that is

908
00:42:34,470 --> 00:42:32,560
actually great news so that's that's the

909
00:42:35,829 --> 00:42:34,480
way that i look at it and before we get

910
00:42:38,470 --> 00:42:35,839
started

911
00:42:40,230 --> 00:42:38,480
uh deep uh today with all of this

912
00:42:42,950 --> 00:42:40,240
exciting news and you doing your thing

913
00:42:46,950 --> 00:42:42,960

and you got a company to run and stuff

914

00:42:51,270 --> 00:42:46,960

yes sir did you today

915

00:42:53,829 --> 00:42:51,280

read or write math

916

00:42:56,230 --> 00:42:53,839

yes you did you did you did did you do

917

00:42:58,630 --> 00:42:56,240

an algorithm today what did you do

918

00:43:00,150 --> 00:42:58,640

so um so one of the things that i'm

919

00:43:04,470 --> 00:43:00,160

doing is just building my

920

00:43:05,030 --> 00:43:04,480

own uh custom uh simulator it's not like

921

00:43:16,470 --> 00:43:05,040

a

922

00:43:18,870 --> 00:43:16,480

like

923

00:43:19,990 --> 00:43:18,880

homework quantum calculations uh when it

924

00:43:22,790 --> 00:43:20,000

comes to like

925

00:43:24,870 --> 00:43:22,800

one qubit and two qubit gate operations

926

00:43:27,910 --> 00:43:24,880

right and so one qubit two qubit gate

927

00:43:28,950 --> 00:43:27,920

operations are mathematically matrices

928

00:43:31,349 --> 00:43:28,960

that you

929

00:43:32,790 --> 00:43:31,359

apply and multiply to a vector that

930

00:43:34,550 --> 00:43:32,800

vector represents

931

00:43:37,430 --> 00:43:34,560

your quantum state and your quantum

932

00:43:39,829 --> 00:43:37,440

state represents your qubits

933

00:43:41,109 --> 00:43:39,839

and so there's a certain number kinds of

934

00:43:43,910 --> 00:43:41,119

gates that you'll

935

00:43:45,349 --> 00:43:43,920

apply again and again and again and for

936

00:43:47,270 --> 00:43:45,359

certain kinds of problems let's say

937

00:43:48,870 --> 00:43:47,280

you're doing material science problems

938

00:43:51,270 --> 00:43:48,880

there may be certain kinds of things

939

00:43:51,670 --> 00:43:51,280

that you want to do again and again

940

00:43:55,190 --> 00:43:51,680

right

941

00:43:56,069 --> 00:43:55,200

so uh um so i'm always building you know

942

00:43:58,069 --> 00:43:56,079

on this little

943

00:44:00,150 --> 00:43:58,079

um personal simulator so that's what i

944

00:44:02,950 --> 00:44:00,160

did one of the things that i did today

945

00:44:03,910 --> 00:44:02,960

was just double check my math so i could

946

00:44:06,550 --> 00:44:03,920

transfer it

947

00:44:07,510 --> 00:44:06,560

you know onto code and then now like i

948

00:44:09,349 --> 00:44:07,520

have this little

949

00:44:10,950 --> 00:44:09,359

you know unique calculator for my

950

00:44:13,109 --> 00:44:10,960

research just like

951
00:44:14,550 --> 00:44:13,119
yeah that was my next question okay are

952
00:44:16,790 --> 00:44:14,560
you white boarding this

953
00:44:18,069 --> 00:44:16,800
or are you using a calculator in a

954
00:44:20,150 --> 00:44:18,079
computer so these days

955
00:44:22,550 --> 00:44:20,160
when when i had access to you know an

956
00:44:23,829 --> 00:44:22,560
office space uh i could white board

957
00:44:26,309 --> 00:44:23,839
and i have a small little white board

958
00:44:29,750 --> 00:44:26,319
you know uh um well two now uh

959
00:44:31,030 --> 00:44:29,760
at home but yeah i actually just my

960
00:44:33,829 --> 00:44:31,040
my place is trying to look more like a

961
00:44:34,390 --> 00:44:33,839
math science uh lab day by day like

962
00:44:37,030 --> 00:44:34,400
thanks to

963
00:44:38,790 --> 00:44:37,040

covid uh you know i have tons of copies

964

00:44:41,109 --> 00:44:38,800

like notebooks that i fill out

965

00:44:42,950 --> 00:44:41,119

literally hundreds probably thousands of

966

00:44:45,589 --> 00:44:42,960

pages at this point man like

967

00:44:46,710 --> 00:44:45,599

you know over the past uh two two three

968

00:44:50,230 --> 00:44:46,720

four years so

969

00:44:53,109 --> 00:44:50,240

yeah right now uh sean carroll

970

00:44:54,790 --> 00:44:53,119

started a new web series and i think

971

00:44:56,790 --> 00:44:54,800

it's called

972

00:44:58,390 --> 00:44:56,800

you know sean carroll the physicist here

973

00:45:00,550 --> 00:44:58,400

at uh caltech

974

00:45:02,069 --> 00:45:00,560

uh i think it's called the world's

975

00:45:03,990 --> 00:45:02,079

biggest problem

976

00:45:05,990 --> 00:45:04,000

or problems i think that's what it's

977

00:45:10,309 --> 00:45:06,000

something similar to that okay

978

00:45:13,910 --> 00:45:10,319

anyway so he he whiteboards

979

00:45:17,270 --> 00:45:13,920

so he's he'll take uh a physics

980

00:45:20,950 --> 00:45:17,280

issue quantum physics issue and

981

00:45:23,430 --> 00:45:20,960

start with uh the statement

982

00:45:25,430 --> 00:45:23,440

and then the question right the journey

983

00:45:26,790 --> 00:45:25,440

is laid out there he does a visual

984

00:45:29,589 --> 00:45:26,800

description

985

00:45:30,790 --> 00:45:29,599

and then he starts man he starts upper

986

00:45:34,230 --> 00:45:30,800

left hand corner

987

00:45:34,950 --> 00:45:34,240

and he's whiteboarding out all of the

988

00:45:38,309 --> 00:45:34,960

math

989

00:45:41,109 --> 00:45:38,319

and and and gets to the end

990

00:45:41,430 --> 00:45:41,119

uh by the end of the video which is you

991

00:45:43,670 --> 00:45:41,440

know

992

00:45:44,870 --> 00:45:43,680

hour hour and a half long and it's

993

00:45:47,829 --> 00:45:44,880

fascinating

994

00:45:49,589 --> 00:45:47,839

to see the process of of working through

995

00:45:52,069 --> 00:45:49,599

the equations it's it's

996

00:45:53,349 --> 00:45:52,079

i'm not quite a physicist but i'm

997

00:45:56,390 --> 00:45:53,359

feeling smarter

998

00:45:58,630 --> 00:45:56,400

it's it's pretty cool awesome

999

00:46:00,390 --> 00:45:58,640

and you know the right ones uh do

1000

00:46:02,470 --> 00:46:00,400

literally make you smarter

1001
00:46:04,790 --> 00:46:02,480
when you listen to them well see it's a

1002
00:46:07,589 --> 00:46:04,800
there is there's an art form

1003
00:46:08,470 --> 00:46:07,599
um if we go back you know to like

1004
00:46:12,230 --> 00:46:08,480
feinman

1005
00:46:15,910 --> 00:46:12,240
and and others uh john wheeler

1006
00:46:17,750 --> 00:46:15,920
um that were really really

1007
00:46:19,430 --> 00:46:17,760
good kip thorne's really good at this

1008
00:46:21,990 --> 00:46:19,440
too and uh

1009
00:46:23,190 --> 00:46:22,000
uh so many others anyway we don't need

1010
00:46:27,349 --> 00:46:23,200
to go down the list

1011
00:46:29,990 --> 00:46:27,359
but physics and quantum physics

1012
00:46:30,950 --> 00:46:30,000
needs i mean it's supported by the math

1013
00:46:33,829 --> 00:46:30,960

of course

1014

00:46:34,790 --> 00:46:33,839

but it needs a storyteller it needs an

1015

00:46:38,230 --> 00:46:34,800

orator

1016

00:46:42,230 --> 00:46:38,240

you need to be able to get the the

1017

00:46:44,150 --> 00:46:42,240

symbols the equations into a visual

1018

00:46:45,510 --> 00:46:44,160

sense so people understand what the heck

1019

00:46:47,670 --> 00:46:45,520

you're talking about

1020

00:46:49,030 --> 00:46:47,680

and that's that was that's what was so

1021

00:46:52,710 --> 00:46:49,040

great about feynman right

1022

00:46:54,470 --> 00:46:52,720

he could uh lay this out in a way that

1023

00:46:57,430 --> 00:46:54,480

everybody could understand

1024

00:46:58,150 --> 00:46:57,440

and then go back to uh you know the

1025

00:47:00,150 --> 00:46:58,160

chalkboard

1026

00:47:01,190 --> 00:47:00,160

and the whiteboard and look at the

1027

00:47:03,430 --> 00:47:01,200

equations

1028

00:47:05,190 --> 00:47:03,440

but unless you have a good storyteller a

1029

00:47:06,870 --> 00:47:05,200

good physicist that can

1030

00:47:09,349 --> 00:47:06,880

you know tell you what he's thinking and

1031

00:47:11,270 --> 00:47:09,359

what his journey is going to encompass

1032

00:47:13,190 --> 00:47:11,280

it's it's meaningless to the public

1033

00:47:15,670 --> 00:47:13,200

isn't it

1034

00:47:17,990 --> 00:47:15,680

that is very true um and it's going to

1035

00:47:20,870 --> 00:47:18,000

be true with our relationship with

1036

00:47:21,910 --> 00:47:20,880

the robots that we build as well uh so

1037

00:47:24,309 --> 00:47:21,920

one of the

1038

00:47:25,510 --> 00:47:24,319

you know problems that i run into with

1039

00:47:28,549 --> 00:47:25,520

my own research

1040

00:47:31,990 --> 00:47:28,559

is the sort of self and

1041

00:47:32,549 --> 00:47:32,000

accepting or admittance that the kind of

1042

00:47:34,309 --> 00:47:32,559

data

1043

00:47:37,430 --> 00:47:34,319

the kind of simulations that we're going

1044

00:47:39,030 --> 00:47:37,440

to be producing you know related to

1045

00:47:40,950 --> 00:47:39,040

our systems as these quantum computers

1046

00:47:42,790 --> 00:47:40,960

get bigger uh related to

1047

00:47:45,109 --> 00:47:42,800

let's say materials potential new

1048

00:47:48,309 --> 00:47:45,119

materials uh to be tested out

1049

00:47:51,349 --> 00:47:48,319

in the real world it's going to surpass

1050

00:47:53,109 --> 00:47:51,359

uh the amount of just like

1051
00:47:55,109 --> 00:47:53,119
brain power raw brain power that we

1052
00:47:55,829 --> 00:47:55,119
would have to process that data

1053
00:47:59,030 --> 00:47:55,839
naturally

1054
00:48:02,309 --> 00:47:59,040
so we are going to have to look to ai

1055
00:48:03,510 --> 00:48:02,319
agents to sort through you know all this

1056
00:48:06,309 --> 00:48:03,520
sort of simulation

1057
00:48:07,990 --> 00:48:06,319
and engineering data that we're getting

1058
00:48:10,710 --> 00:48:08,000
out of our computers

1059
00:48:11,190 --> 00:48:10,720
um and it's going to be very interesting

1060
00:48:13,589 --> 00:48:11,200
right

1061
00:48:15,910 --> 00:48:13,599
where where we have to hope i'll give an

1062
00:48:18,630 --> 00:48:15,920
example like if that sounds too abstract

1063
00:48:19,510 --> 00:48:18,640

um let's say that let's say that elon

1064

00:48:23,349 --> 00:48:19,520

wants to

1065

00:48:24,390 --> 00:48:23,359

make uh let's say like he's been egged

1066

00:48:27,109 --> 00:48:24,400

on and up right

1067

00:48:28,230 --> 00:48:27,119

uh about the whole uap situation the tic

1068

00:48:30,309 --> 00:48:28,240

tacs and he's like

1069

00:48:31,670 --> 00:48:30,319

all right uh let's figure out how

1070

00:48:34,150 --> 00:48:31,680

quickly can we

1071

00:48:35,430 --> 00:48:34,160

uh pivot from the kind of technology

1072

00:48:38,470 --> 00:48:35,440

that we're building

1073

00:48:41,829 --> 00:48:38,480

right now um for spacex uh to

1074

00:48:43,109 --> 00:48:41,839

tic tac level technology um if you were

1075

00:48:45,750 --> 00:48:43,119

to black box that

1076

00:48:46,710 --> 00:48:45,760

problem what you could do let's say at a

1077

00:48:49,750 --> 00:48:46,720

very naive

1078

00:48:52,309 --> 00:48:49,760

uh method could be just

1079

00:48:53,349 --> 00:48:52,319

trying to match the velocity and the

1080

00:48:55,190 --> 00:48:53,359

acceleration

1081

00:48:57,349 --> 00:48:55,200

that the tick tock was able the

1082

00:49:01,109 --> 00:48:57,359

tic-tac-it was able to do right

1083

00:49:01,430 --> 00:49:01,119

so um so the tic tac you know right it

1084

00:49:03,510 --> 00:49:01,440

was

1085

00:49:05,349 --> 00:49:03,520

able to do at least officially uh

1086

00:49:07,670 --> 00:49:05,359

roughly mach 31

1087

00:49:09,349 --> 00:49:07,680

um and you know for context something

1088

00:49:10,630 --> 00:49:09,359

that always blows my mind is when we

1089

00:49:12,470 --> 00:49:10,640

compare it to the

1090

00:49:15,349 --> 00:49:12,480

international space station which i

1091

00:49:18,470 --> 00:49:15,359

believe travels at mach 25

1092

00:49:19,109 --> 00:49:18,480

so um you know you know so uh elon could

1093

00:49:22,549 --> 00:49:19,119

try to

1094

00:49:25,990 --> 00:49:22,559

1000 g

1095

00:49:28,069 --> 00:49:26,000

forces plus now in order to get there

1096

00:49:29,910 --> 00:49:28,079

one might argue that it's of course a

1097

00:49:31,670 --> 00:49:29,920

theoretical physics problem right of

1098

00:49:33,190 --> 00:49:31,680

course is an engineering problem in

1099

00:49:35,190 --> 00:49:33,200

science problem

1100

00:49:36,870 --> 00:49:35,200

and and one half of the equation is

1101

00:49:39,430 --> 00:49:36,880

going to be the kinds of

1102

00:49:40,470 --> 00:49:39,440

materials at least one half of it is the

1103

00:49:42,950 --> 00:49:40,480

materials

1104

00:49:43,750 --> 00:49:42,960

required to build such a craft right how

1105

00:49:46,470 --> 00:49:43,760

do they

1106

00:49:48,549 --> 00:49:46,480

function together what is so magical

1107

00:49:51,349 --> 00:49:48,559

about the skin in the interior

1108

00:49:53,750 --> 00:49:51,359

that allows uh for them to you know for

1109

00:49:56,309 --> 00:49:53,760

to manipulate space time potentially

1110

00:49:58,790 --> 00:49:56,319

right or how is that being done and so

1111

00:50:01,829 --> 00:49:58,800

uh when you look at that problem

1112

00:50:02,230 --> 00:50:01,839

uh imagine felon decided okay well you

1113

00:50:05,910 --> 00:50:02,240

know

1114

00:50:07,829 --> 00:50:05,920

i don't want to wait until 200 or 300

1115

00:50:08,870 --> 00:50:07,839

years to see that technology in my

1116

00:50:12,549 --> 00:50:08,880

lifetime

1117

00:50:13,190 --> 00:50:12,559

i want uh to do it now um well what you

1118

00:50:16,390 --> 00:50:13,200

could do

1119

00:50:18,870 --> 00:50:16,400

is if you had a very powerful computer

1120

00:50:19,910 --> 00:50:18,880

that had both uh classical computing

1121

00:50:25,109 --> 00:50:19,920

capabilities

1122

00:50:26,549 --> 00:50:25,119

computer would be able to sort through

1123

00:50:31,109 --> 00:50:26,559

quantum data

1124

00:50:33,349 --> 00:50:31,119

that's really important because

1125

00:50:35,430 --> 00:50:33,359

every material in the end of the day

1126

00:50:36,870 --> 00:50:35,440

every superconductor

1127

00:50:39,589 --> 00:50:36,880

right everything that may have

1128

00:50:42,150 --> 00:50:39,599

anti-gravity property should they exist

1129

00:50:42,950 --> 00:50:42,160

will have a what you can think of as a

1130

00:50:45,990 --> 00:50:42,960

genome

1131

00:50:49,030 --> 00:50:46,000

right like a fingerprint a clear

1132

00:50:50,069 --> 00:50:49,040

description um using purely quantum

1133

00:50:51,990 --> 00:50:50,079

mechanics

1134

00:50:54,150 --> 00:50:52,000

um and the treatment of quantum

1135

00:50:55,829 --> 00:50:54,160

mechanics sorry so um

1136

00:50:57,349 --> 00:50:55,839

that's the that's the magic is one of

1137

00:50:59,349 --> 00:50:57,359

the things that richard feynman

1138

00:51:00,630 --> 00:50:59,359

by the way i'm sure you know this but

1139

00:51:03,589 --> 00:51:00,640

for the audience well

1140

00:51:06,390 --> 00:51:03,599

uh richard feynman is technically the

1141

00:51:09,510 --> 00:51:06,400

father of quantum computing he's the guy

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00:51:11,349 --> 00:51:09,520

who uh suggested what it

1143

00:51:12,790 --> 00:51:11,359

why we would even need one in the first

1144

00:51:15,109 --> 00:51:12,800

place and describe what

1145

00:51:15,910 --> 00:51:15,119

it would be and what it would do and the

1146

00:51:18,790 --> 00:51:15,920

whole point

1147

00:51:19,270 --> 00:51:18,800

was uh he's very famous for saying this

1148

00:51:22,390 --> 00:51:19,280

quote

1149

00:51:25,430 --> 00:51:22,400

uh and he says that nature is

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00:51:26,470 --> 00:51:25,440

quantum mechanical damage so in order to

1151
00:51:29,430 --> 00:51:26,480
simulate it

1152
00:51:30,950 --> 00:51:29,440
you need a computer or a system that is

1153
00:51:34,150 --> 00:51:30,960
quantum mechanical

1154
00:51:37,270 --> 00:51:34,160
in nature so um that's what we're

1155
00:51:39,990 --> 00:51:37,280
dealing with here if you want to bypass

1156
00:51:41,670 --> 00:51:40,000
the sort of dumb trial and error way of

1157
00:51:42,470 --> 00:51:41,680
doing science that we've been doing for

1158
00:51:45,430 --> 00:51:42,480
the past

1159
00:51:45,750 --> 00:51:45,440
hundreds thousands of years you treat

1160
00:51:49,589 --> 00:51:45,760
you

1161
00:51:51,670 --> 00:51:49,599
a quantum computer

1162
00:51:52,950 --> 00:51:51,680
to figure out how to find those

1163
00:51:55,109 --> 00:51:52,960

materials instead

1164

00:51:57,030 --> 00:51:55,119

for you but then at that point there's

1165

00:51:58,309 --> 00:51:57,040

that knowledge gap right so that's why i

1166

00:52:00,069 --> 00:51:58,319

bring that up because

1167

00:52:01,670 --> 00:52:00,079

right now we have these knowledge gaps

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00:52:03,670 --> 00:52:01,680

between let's say

1169

00:52:05,510 --> 00:52:03,680

like genius theoretical physicists like

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00:52:08,390 --> 00:52:05,520

feynman and everybody else

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00:52:08,950 --> 00:52:08,400

but even that gap can somewhat be uh

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00:52:11,109 --> 00:52:08,960

kind of

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00:52:12,950 --> 00:52:11,119

overcome through communication through

1174

00:52:15,270 --> 00:52:12,960

being a good communicator

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00:52:17,190 --> 00:52:15,280

i don't know if we'll we figure that out

1176

00:52:19,910 --> 00:52:17,200

yet with our machines

1177

00:52:21,109 --> 00:52:19,920

um so yeah yeah yeah that's a that's a

1178

00:52:23,990 --> 00:52:21,119

really great point

1179

00:52:25,109 --> 00:52:24,000

and there is another aspect to this one

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00:52:27,270 --> 00:52:25,119

that we are going

1181

00:52:29,430 --> 00:52:27,280

it's a great segue that we're going to

1182

00:52:32,470 --> 00:52:29,440

be discussing a lot tonight

1183

00:52:35,430 --> 00:52:32,480

in that uh when you bring up

1184

00:52:35,990 --> 00:52:35,440

uh physics and and especially the

1185

00:52:39,349 --> 00:52:36,000

quantum

1186

00:52:43,270 --> 00:52:39,359

side of it mechanics in theory

1187

00:52:47,030 --> 00:52:43,280

is this is stuff that in a general sense

1188

00:52:48,470 --> 00:52:47,040

we can't see okay that's that's it we we

1189

00:52:51,030 --> 00:52:48,480

can't see it

1190

00:52:51,750 --> 00:52:51,040

we know it's there we know it exists and

1191

00:52:54,710 --> 00:52:51,760

we can

1192

00:52:55,750 --> 00:52:54,720

plug in the numbers but that's what you

1193

00:52:58,390 --> 00:52:55,760

do

1194

00:52:58,870 --> 00:52:58,400

theoretical right and you're trying to

1195

00:53:01,349 --> 00:52:58,880

measure

1196

00:53:02,790 --> 00:53:01,359

you're trying to observe and then you're

1197

00:53:06,069 --> 00:53:02,800

trying to get the results

1198

00:53:08,710 --> 00:53:06,079

that's that's it in a nutshell and

1199

00:53:09,430 --> 00:53:08,720

physics as crazy and as complicated as

1200

00:53:11,349 --> 00:53:09,440

it is

1201
00:53:13,589 --> 00:53:11,359
you're always going to start with the

1202
00:53:15,349 --> 00:53:13,599
basics just like you said

1203
00:53:17,270 --> 00:53:15,359
you're gonna have something is gonna

1204
00:53:19,589 --> 00:53:17,280
move something's gonna have

1205
00:53:21,030 --> 00:53:19,599
mass and something's gonna have speed

1206
00:53:23,270 --> 00:53:21,040
you're gonna have a point a

1207
00:53:24,790 --> 00:53:23,280
you're gonna have a point b if you have

1208
00:53:25,750 --> 00:53:24,800
all of those numbers then you start

1209
00:53:28,390 --> 00:53:25,760
plugging them

1210
00:53:29,430 --> 00:53:28,400
in and then you can start to work your

1211
00:53:32,710 --> 00:53:29,440
way forward

1212
00:53:33,109 --> 00:53:32,720
and as complex as it is if you know

1213
00:53:36,150 --> 00:53:33,119

those

1214

00:53:37,910 --> 00:53:36,160

general things about physics you can

1215

00:53:39,349 --> 00:53:37,920

if you know if you want to just apply

1216

00:53:42,390 --> 00:53:39,359

yourself you can

1217

00:53:45,030 --> 00:53:42,400

follow your way through the method

1218

00:53:47,430 --> 00:53:45,040

to get to the end results that's why

1219

00:53:48,390 --> 00:53:47,440

elon would be able to do what he's going

1220

00:53:51,589 --> 00:53:48,400

to do

1221

00:53:54,630 --> 00:53:51,599

which is also that application

1222

00:53:56,950 --> 00:53:54,640

d deep of the

1223

00:53:57,829 --> 00:53:56,960

unknown and trying to turn it into the

1224

00:53:59,589 --> 00:53:57,839

known

1225

00:54:01,030 --> 00:53:59,599

is the same thing when you're studying

1226

00:54:03,990 --> 00:54:01,040

ufos

1227

00:54:05,910 --> 00:54:04,000

right is it the same methodology where

1228

00:54:07,510 --> 00:54:05,920

we have all these great unknowns we have

1229

00:54:09,990 --> 00:54:07,520

some knowns

1230

00:54:12,069 --> 00:54:10,000

right we have photographs and videos we

1231

00:54:15,190 --> 00:54:12,079

have speed we have color

1232

00:54:16,069 --> 00:54:15,200

we have uh time we have distances we

1233

00:54:18,230 --> 00:54:16,079

have location

1234

00:54:20,549 --> 00:54:18,240

we have a lot of data that we can plug

1235

00:54:24,790 --> 00:54:22,549

but we have data that we can't plug in

1236

00:54:27,910 --> 00:54:24,800

that we have to figure out right so

1237

00:54:30,230 --> 00:54:27,920

are the same two i know it sounds crazy

1238

00:54:34,069 --> 00:54:30,240

but are the two fields actually closer

1239

00:54:38,630 --> 00:54:37,190

yes um i i certainly think so and in

1240

00:54:42,150 --> 00:54:38,640

more ways than one right

1241

00:54:45,190 --> 00:54:42,160

uh so one abstract way that um

1242

00:54:48,390 --> 00:54:45,200

the two fields are very deeply

1243

00:54:52,309 --> 00:54:48,400

related uh i think is that

1244

00:54:54,150 --> 00:54:52,319

if we are dealing with um here's two

1245

00:54:56,549 --> 00:54:54,160

things so if we're dealing with

1246

00:54:57,430 --> 00:54:56,559

uh let's say just let's deal with the

1247

00:54:59,589 --> 00:54:57,440

eth

1248

00:55:00,950 --> 00:54:59,599

write the extraterrestrial hypothesis

1249

00:55:03,270 --> 00:55:00,960

per second where we have

1250

00:55:06,069 --> 00:55:03,280

yeah these physical um you know

1251
00:55:07,670 --> 00:55:06,079
biological life forms from other planets

1252
00:55:09,670 --> 00:55:07,680
if they can get here then at the very

1253
00:55:12,390 --> 00:55:09,680
least their material science and their

1254
00:55:13,910 --> 00:55:12,400
engineering is more advanced than ours

1255
00:55:17,430 --> 00:55:13,920
and if that is the case

1256
00:55:19,270 --> 00:55:17,440
then they would absolutely have a better

1257
00:55:20,789 --> 00:55:19,280
understanding of quantum mechanics in

1258
00:55:22,150 --> 00:55:20,799
general relativity

1259
00:55:24,390 --> 00:55:22,160
and we don't know you know how they

1260
00:55:27,349 --> 00:55:24,400
would perceive physics uh

1261
00:55:29,109 --> 00:55:27,359
there's also uh uh something about

1262
00:55:29,829 --> 00:55:29,119
structural realism which we'll talk

1263
00:55:32,789 --> 00:55:29,839

about

1264

00:55:33,510 --> 00:55:32,799

uh uh later um but it's totally worth

1265

00:55:36,549 --> 00:55:33,520

getting into

1266

00:55:37,829 --> 00:55:36,559

um and it's relevant to the et uh and

1267

00:55:40,630 --> 00:55:37,839

just like aliens in general

1268

00:55:41,190 --> 00:55:40,640

the idea of non-human life but anyways

1269

00:55:44,309 --> 00:55:41,200

um

1270

00:55:47,349 --> 00:55:44,319

so you so those guys would have

1271

00:55:51,190 --> 00:55:47,359

the ability uh and they would know more

1272

00:55:54,710 --> 00:55:51,200

physical immersion properties of matter

1273

00:55:57,349 --> 00:55:54,720

than we do um and so again like

1274

00:55:58,630 --> 00:55:57,359

like calculating that or finding that is

1275

00:56:01,589 --> 00:55:58,640

a quantum physics

1276

00:56:02,390 --> 00:56:01,599

uh phenomena or quantum physics problem

1277

00:56:05,030 --> 00:56:02,400

so

1278

00:56:05,829 --> 00:56:05,040

there's a world right there where or a

1279

00:56:07,109 --> 00:56:05,839

scenario

1280

00:56:09,589 --> 00:56:07,119

where the intersection of quantum

1281

00:56:12,710 --> 00:56:09,599

physics intersects uaps

1282

00:56:13,109 --> 00:56:12,720

directly where we are looking at all

1283

00:56:15,589 --> 00:56:13,119

right

1284

00:56:17,190 --> 00:56:15,599

can a our models of physics describe

1285

00:56:19,589 --> 00:56:17,200

what we're seeing and if not

1286

00:56:20,230 --> 00:56:19,599

what is the difference um and is the

1287

00:56:24,630 --> 00:56:20,240

difference

1288

00:56:27,030 --> 00:56:24,640

because we're observing materials

1289

00:56:27,910 --> 00:56:27,040

that we can discover using existing

1290

00:56:30,470 --> 00:56:27,920

tools right

1291

00:56:32,630 --> 00:56:30,480

using our existing quantum computers or

1292

00:56:33,750 --> 00:56:32,640

is it materials that just simply cannot

1293

00:56:36,150 --> 00:56:33,760

be discovered

1294

00:56:37,190 --> 00:56:36,160

uh using quantum mechanics based tools

1295

00:56:38,950 --> 00:56:37,200

and it's something

1296

00:56:40,789 --> 00:56:38,960

even deeper and more advanced and

1297

00:56:41,510 --> 00:56:40,799

something that we haven't conceptualized

1298

00:56:44,390 --> 00:56:41,520

yet

1299

00:56:45,670 --> 00:56:44,400

um you know you you can never rule that

1300

00:56:49,270 --> 00:56:45,680

out uh i don't

1301

00:56:52,870 --> 00:56:49,280

think that's the case though i think uh

1302

00:56:55,030 --> 00:56:52,880

yeah um i think uh any species that we

1303

00:56:57,990 --> 00:56:55,040

can actually physically observe that has

1304

00:56:59,589 --> 00:56:58,000

mass um that isn't of course tricking us

1305

00:57:00,309 --> 00:56:59,599

right assuming that this isn't the

1306

00:57:02,470 --> 00:57:00,319

trickster

1307

00:57:03,670 --> 00:57:02,480

right or some super intelligence is

1308

00:57:05,990 --> 00:57:03,680

messing with us

1309

00:57:07,430 --> 00:57:06,000

uh then uh you know those guys are

1310

00:57:10,710 --> 00:57:07,440

probably not

1311

00:57:12,950 --> 00:57:10,720

that much too much far beyond you know

1312

00:57:13,910 --> 00:57:12,960

quantum mechanics as we know it right

1313

00:57:16,390 --> 00:57:13,920

their idea of

1314

00:57:17,430 --> 00:57:16,400

atomic physics would definitely be a lot

1315

00:57:18,870 --> 00:57:17,440

more advanced

1316

00:57:20,710 --> 00:57:18,880

but i don't think it would be so

1317

00:57:21,910 --> 00:57:20,720

advanced that like

1318

00:57:23,349 --> 00:57:21,920

they would be considered

1319

00:57:24,470 --> 00:57:23,359

multi-dimensional or had those

1320

00:57:27,190 --> 00:57:24,480

capabilities

1321

00:57:28,309 --> 00:57:27,200

for example uh like and that's because

1322

00:57:29,030 --> 00:57:28,319

you know they have to move around

1323

00:57:32,069 --> 00:57:29,040

physically

1324

00:57:35,430 --> 00:57:32,079

and so if you stay if you stay

1325

00:57:37,990 --> 00:57:35,440

inside of eth sure

1326

00:57:39,829 --> 00:57:38,000

right that's you you're you have to stay

1327

00:57:42,630 --> 00:57:39,839

inside of vth for that too

1328

00:57:45,349 --> 00:57:42,640

uh to apply let me ask you this we've

1329

00:57:48,630 --> 00:57:45,359

got two minutes to the break

1330

00:57:51,829 --> 00:57:48,640

our what we have

1331

00:57:56,069 --> 00:57:51,839

how do i say this right our

1332

00:57:58,230 --> 00:57:56,079

version of the laws of physics

1333

00:58:00,710 --> 00:57:58,240

that apply here on earth because that is

1334

00:58:02,710 --> 00:58:00,720

based around gravity here on earth and

1335

00:58:03,990 --> 00:58:02,720

other things there's a lot of elements

1336

00:58:07,510 --> 00:58:04,000

to it but

1337

00:58:11,430 --> 00:58:07,520

our laws of physics as they apply to us

1338

00:58:12,950 --> 00:58:11,440

do they apply in zeta reticuli do they

1339

00:58:15,109 --> 00:58:12,960

apply an andromeda

1340

00:58:16,870 --> 00:58:15,119

you know another galaxy that is 2

1341

00:58:19,349 --> 00:58:16,880

million light years away

1342

00:58:21,270 --> 00:58:19,359

same laws of physics or would they be

1343

00:58:24,069 --> 00:58:21,280

different

1344

00:58:25,829 --> 00:58:24,079

so as far as we've observed you know

1345

00:58:29,109 --> 00:58:25,839

they all follow the same

1346

00:58:31,109 --> 00:58:29,119

laws of physics right uh um at least in

1347

00:58:34,230 --> 00:58:31,119

the observable what's called a hubble

1348

00:58:36,710 --> 00:58:34,240

volume uh right everything we've ever

1349

00:58:37,270 --> 00:58:36,720

we and what we can observe and measure

1350

00:58:40,230 --> 00:58:37,280

um

1351
00:58:41,109 --> 00:58:40,240
through the hubble telescope has

1352
00:58:44,390 --> 00:58:41,119
followed

1353
00:58:46,230 --> 00:58:44,400
the kinds of physics and has broken

1354
00:58:48,309 --> 00:58:46,240
the kinds of physics that we thought we

1355
00:58:49,670 --> 00:58:48,319
knew in the same kinds of ways the same

1356
00:58:52,630 --> 00:58:49,680
consistent ways

1357
00:58:53,750 --> 00:58:52,640
but it's still totally open-ended as far

1358
00:58:56,390 --> 00:58:53,760
as we know

1359
00:58:57,589 --> 00:58:56,400
uh you know um it's a very open-ended

1360
00:59:01,270 --> 00:58:57,599
question in physics right

1361
00:59:01,990 --> 00:59:01,280
is the laws of the universe right laws

1362
00:59:04,390 --> 00:59:02,000
of physics

1363
00:59:06,069 --> 00:59:04,400

uniform right outside of the hubble

1364

00:59:07,910 --> 00:59:06,079

volume right what what if

1365

00:59:09,510 --> 00:59:07,920

right outside of what we can observe and

1366

00:59:11,270 --> 00:59:09,520

measure like let's say

1367

00:59:12,710 --> 00:59:11,280

a billion light years outside of that

1368

00:59:15,750 --> 00:59:12,720

past that point

1369

00:59:17,190 --> 00:59:15,760

uh you know gravity is upside down right

1370

00:59:18,950 --> 00:59:17,200

like everything that's what i'm saying

1371

00:59:22,150 --> 00:59:18,960

yeah exactly

1372

00:59:24,549 --> 00:59:22,160

exactly well in another if

1373

00:59:26,390 --> 00:59:24,559

there's the multiverse aspect of this

1374

00:59:28,549 --> 00:59:26,400

and in another universe

1375

00:59:33,990 --> 00:59:28,559

they could have a completely different

1376

00:59:38,069 --> 00:59:37,510

that's right exactly so like in a

1377

00:59:41,030 --> 00:59:38,079

different

1378

00:59:43,510 --> 00:59:41,040

world anything that yeah exactly um that

1379

00:59:44,630 --> 00:59:43,520

opens up so it's where sean carroll's

1380

00:59:46,549 --> 00:59:44,640

work really comes in

1381

00:59:48,230 --> 00:59:46,559

right we can talk about this you know

1382

00:59:49,589 --> 00:59:48,240

after the break as well

1383

00:59:51,670 --> 00:59:49,599

but you know the multiverse

1384

00:59:53,190 --> 00:59:51,680

interpretation uh

1385

00:59:55,109 --> 00:59:53,200

and all the different interpretation

1386

00:59:58,150 --> 00:59:55,119

quantum mechanics plays a role

1387

00:59:59,349 --> 00:59:58,160

too um but we'll talk about structural

1388

01:00:01,990 --> 00:59:59,359

realism

1389

01:00:03,670 --> 01:00:02,000
as well because uh now that you

1390

01:00:05,670 --> 01:00:03,680
mentioned it right that's the next

1391

01:00:09,190 --> 01:00:05,680
question that we need to be answering

1392

01:00:11,030 --> 01:00:09,200
is um basically uh whether

1393

01:00:12,150 --> 01:00:11,040
because it matters about it affects how

1394

01:00:14,069 --> 01:00:12,160
we can communicate with other

1395

01:00:16,309 --> 01:00:14,079
intelligences how much we can

1396

01:00:18,950 --> 01:00:16,319
convey how much information but

1397

01:00:22,150 --> 01:00:18,960
basically structural realism

1398

01:00:25,430 --> 01:00:22,160
looks at and is looks at

1399

01:00:27,829 --> 01:00:25,440
the belief of whether the math of

1400

01:00:29,030 --> 01:00:27,839
a physics equation actually represents

1401

01:00:30,710 --> 01:00:29,040

what's happening

1402

01:00:32,950 --> 01:00:30,720

underneath like whether it represents

1403

01:00:33,589 --> 01:00:32,960

true reality or base reality or whether

1404

01:00:35,750 --> 01:00:33,599

it's just

1405

01:00:37,270 --> 01:00:35,760

a good description a good approximation

1406

01:00:38,710 --> 01:00:37,280

right a lot of people believe

1407

01:00:41,030 --> 01:00:38,720

mathematics is just something we

1408

01:00:42,789 --> 01:00:41,040

invented it's not something you discover

1409

01:00:44,950 --> 01:00:42,799

a facet of the universe

1410

01:00:46,390 --> 01:00:44,960

but if it is something you discover a

1411

01:00:48,150 --> 01:00:46,400

facet of the universe something

1412

01:00:49,990 --> 01:00:48,160

objectively you'll keep coming

1413

01:00:52,230 --> 01:00:50,000

across again and again then

1414

01:00:55,510 --> 01:00:52,240

theoretically there are ways

1415

01:00:57,270 --> 01:00:55,520

of having a universal language that is

1416

01:00:57,990 --> 01:00:57,280

mathematically based we can talk about

1417

01:01:00,309 --> 01:00:58,000

this

1418

01:01:01,510 --> 01:01:00,319

um or at least convey just mathematical

1419

01:01:04,309 --> 01:01:01,520

truths universally

1420

01:01:06,390 --> 01:01:04,319

to other species that's super cool right

1421

01:01:08,870 --> 01:01:06,400

using something called category theory

1422

01:01:10,549 --> 01:01:08,880

that's right yeah yeah let's cover that

1423

01:01:12,950 --> 01:01:10,559

when we come back after the break our

1424

01:01:16,150 --> 01:01:12,960

guest tonight deep prasad

1425

01:01:18,870 --> 01:01:16,160

we are going to tonight cover

1426

01:01:20,309 --> 01:01:18,880

ufo research and how to apply modern

1427

01:01:23,109 --> 01:01:20,319

science and physics

1428

01:01:23,750 --> 01:01:23,119

to the known and unknown data don't get

1429

01:01:26,230 --> 01:01:23,760

no much

1430

01:01:28,150 --> 01:01:26,240

better than that and that's my broken

1431

01:01:28,789 --> 01:01:28,160

english because i'm a doofus and deep

1432

01:01:40,730 --> 01:01:28,799

isn't

1433

01:01:43,590 --> 01:01:43,060

[Music]

1434

01:01:51,750 --> 01:01:43,600

[Applause]

1435

01:01:53,910 --> 01:01:51,760

[Music]

1436

01:01:56,309 --> 01:01:53,920

this is fade to black with jimmy church

1437

01:02:01,270 --> 01:01:56,319

on the game changer radio network

1438

01:02:03,750 --> 01:02:01,280

and kgra the global radio alliance

1439

01:02:04,789 --> 01:02:03,760

this is kgra digital broadcasting

1440

01:02:09,190 --> 01:02:04,799

station

1441

01:02:11,270 --> 01:02:09,200

salt lake city utah van buren arkansas

1442

01:02:12,870 --> 01:02:11,280

hello my name is billy carson and i'm a

1443

01:02:15,109 --> 01:02:12,880

best-selling author and the founder of

1444

01:02:17,029 --> 01:02:15,119

forbidden knowledge dot tv together with

1445

01:02:18,470 --> 01:02:17,039

my team we have built a all new contest

1446

01:02:20,069 --> 01:02:18,480

streaming tv platform

1447

01:02:21,990 --> 01:02:20,079

designed with every family member in

1448

01:02:23,349 --> 01:02:22,000

mind if you have ever wanted to travel

1449

01:02:24,789 --> 01:02:23,359

the world and attend lectures and

1450

01:02:25,910 --> 01:02:24,799

workshops from your favorite speakers

1451

01:02:28,549 --> 01:02:25,920

but weren't able to

1452

01:02:29,190 --> 01:02:28,559

look no further forbidden knowledge dot

1453

01:02:30,870 --> 01:02:29,200

tv

1454

01:02:32,789 --> 01:02:30,880

there are dozens of workshops and

1455

01:02:34,870 --> 01:02:32,799

lectures from speakers you know and love

1456

01:02:36,789 --> 01:02:34,880

we have also included amazing categories

1457

01:02:38,630 --> 01:02:36,799

to assure that your consciousness is

1458

01:02:39,270 --> 01:02:38,640

entertained and elevating on a daily

1459

01:02:41,349 --> 01:02:39,280

basis

1460

01:02:42,549 --> 01:02:41,359

amazing interviews ancient history

1461

01:02:44,549 --> 01:02:42,559

ascension knowledge

1462

01:02:45,670 --> 01:02:44,559

wisdom teachings documentaries

1463

01:02:47,910 --> 01:02:45,680

conspiracies

1464

01:02:50,630 --> 01:02:47,920

mysteries health and fitness conscious

1465

01:02:52,470 --> 01:02:50,640

cooking meditations finance yoga and so

1466

01:02:54,870 --> 01:02:52,480

much more to start your free trial

1467

01:02:57,029 --> 01:02:54,880

on any mobile device or computer surf to

1468

01:02:58,789 --> 01:02:57,039

forbidden knowledge dot tv

1469

01:03:01,910 --> 01:02:58,799

that's forbidden knowledge with the

1470

01:03:04,309 --> 01:03:01,920

number four forbidden knowledge dot tv

1471

01:03:07,829 --> 01:03:04,319

again visit forbidden knowledge dot tv

1472

01:03:10,789 --> 01:03:07,839

today listen

1473

01:03:12,789 --> 01:03:10,799

i know and you know that you've always

1474

01:03:15,029 --> 01:03:12,799

wanted your first crystal skull

1475

01:03:17,190 --> 01:03:15,039

or maybe you're a collector just like me

1476
01:03:18,950 --> 01:03:17,200
but you just don't know where to go to

1477
01:03:22,270 --> 01:03:18,960
find the real thing

1478
01:03:23,670 --> 01:03:22,280
then i met carolyn ford over at

1479
01:03:26,069 --> 01:03:23,680
einsteinthecrystalskull.com

1480
01:03:28,069 --> 01:03:26,079
carolyn is the guardian of einstein one

1481
01:03:29,589 --> 01:03:28,079
of the most respected ancient crystal

1482
01:03:31,270 --> 01:03:29,599
skulls in the world

1483
01:03:33,510 --> 01:03:31,280
all of her unique skulls have been

1484
01:03:35,430 --> 01:03:33,520
imprinted sitting with einstein in his

1485
01:03:37,750 --> 01:03:35,440
sacred lodge and are carved from the

1486
01:03:39,910 --> 01:03:37,760
finest gemstone and materials

1487
01:03:42,069 --> 01:03:39,920
imprinting is the process of receiving

1488
01:03:45,270 --> 01:03:42,079

the ancient wisdom from the master

1489

01:03:45,829 --> 01:03:45,280

skull or master computer einstein the

1490

01:03:48,230 --> 01:03:45,839

ancient

1491

01:03:50,309 --> 01:03:48,240

crystal skull to see carolyn's current

1492

01:03:51,190 --> 01:03:50,319

collection of crystal skulls just visit

1493

01:03:54,069 --> 01:03:51,200

her store at

1494

01:03:56,150 --> 01:03:54,079

einstein the crystal skull dot com click

1495

01:03:58,549 --> 01:03:56,160

on the banner over on our site

1496

01:03:59,910 --> 01:03:58,559

don't forget to use the promo code jimmy

1497

01:04:03,029 --> 01:03:59,920

at checkout to receive

1498

01:04:03,829 --> 01:04:03,039

10 off of your order today that's promo

1499

01:04:06,390 --> 01:04:03,839

code

1500

01:04:07,670 --> 01:04:06,400

jimmy finding your first or next crystal

1501

01:04:13,190 --> 01:04:07,680

skull is easy

1502

01:04:15,349 --> 01:04:13,200

just visit einsteinthecrystalskull.com

1503

01:04:17,910 --> 01:04:15,359

when you take the beans from central

1504

01:04:19,190 --> 01:04:17,920

america with dashes of indonesian and

1505

01:04:21,430 --> 01:04:19,200

african mixed in

1506

01:04:22,870 --> 01:04:21,440

and then roasted to the dark side of

1507

01:04:26,069 --> 01:04:22,880

fade to black

1508

01:04:29,029 --> 01:04:26,079

you create the ultimate brew of fringe

1509

01:04:29,750 --> 01:04:29,039

introducing the fade to black blend from

1510

01:04:35,270 --> 01:04:29,760

river moon

1511

01:04:35,750 --> 01:04:35,280

customized roast was created for the

1512

01:04:38,950 --> 01:04:35,760

love

1513

01:04:41,829 --> 01:04:38,960

of fade to black the alchemy of

1514

01:04:45,109 --> 01:04:41,839

masterful roasting and smoking the beans

1515

01:04:48,630 --> 01:04:45,119

is in every sip of this full-bodied dark

1516

01:04:50,630 --> 01:04:48,640

java i need my coffee doc deep

1517

01:04:53,190 --> 01:04:50,640

with distinct bittersweet chocolate

1518

01:04:55,589 --> 01:04:53,200

highlights just like the bunker

1519

01:04:56,470 --> 01:04:55,599

leaning further into the darkness of the

1520

01:04:58,870 --> 01:04:56,480

roast is

1521

01:04:59,750 --> 01:04:58,880

fade to black blend from river moon

1522

01:05:01,470 --> 01:04:59,760

coffee

1523

01:05:03,430 --> 01:05:01,480

just click on the banner at

1524

01:05:05,109 --> 01:05:03,440

jimmychurchradio.com and use the promo

1525

01:05:08,309 --> 01:05:05,119

code f2b blend

1526

01:05:12,789 --> 01:05:08,319

for 15 off of your order today

1527

01:05:18,470 --> 01:05:14,549

you're listening to my main man jimmy

1528

01:05:21,990 --> 01:05:18,480

church on jimmychurchradio.com

1529

01:05:25,190 --> 01:05:22,000

hi this you're listening to is

1530

01:05:27,990 --> 01:05:25,200

good friend jimmy church fade to black

1531

01:05:31,589 --> 01:05:28,000

on the game changer network and the kgra

1532

01:05:34,829 --> 01:05:31,599

digital broadcast station

1533

01:05:37,349 --> 01:05:34,839

this is toby kebbel you're listening to

1534

01:05:40,069 --> 01:05:37,359

jimmychurchradio.com don't hurt me jimmy

1535

01:05:41,829 --> 01:05:40,079

i'm only little hey i'm adrian grenier

1536

01:05:46,390 --> 01:05:41,839

and this is ari gold we're the honey

1537

01:05:50,390 --> 01:05:48,789

hey i'm adrian grenier and i'm ari gold

1538

01:05:52,630 --> 01:05:50,400

we're the honey brothers

1539

01:05:54,230 --> 01:05:52,640

and you're listening to jimmy church a

1540

01:05:55,910 --> 01:05:54,240

revolution

1541

01:05:57,829 --> 01:05:55,920

this is jimmy churchill fade to black

1542

01:06:00,150 --> 01:05:57,839

and you can become an official fate or

1543

01:06:04,470 --> 01:06:00,160

not by just going to our membership

1544

01:06:06,470 --> 01:06:04,480

section at jimmychurchradio.com

1545

01:06:07,910 --> 01:06:06,480

hello this is serena wright taylor from

1546

01:06:09,829 --> 01:06:07,920

conscious life expo

1547

01:06:10,950 --> 01:06:09,839

and you're listening to fade to black

1548

01:06:13,190 --> 01:06:10,960

with jimmy church

1549

01:06:14,789 --> 01:06:13,200

who holds the lucky pony record for the

1550

01:06:18,950 --> 01:06:14,799

best astrological chart

1551

01:06:20,630 --> 01:06:18,960

since 1963. true story

1552

01:06:22,309 --> 01:06:20,640

this is micah hanks of the ghrelian

1553

01:06:23,750 --> 01:06:22,319

report and you're listening to jimmy

1554

01:06:25,510 --> 01:06:23,760

church on fade to black

1555

01:06:27,510 --> 01:06:25,520

across the globe on the game changer

1556

01:06:36,750 --> 01:06:27,520

radio network and the one and only

1557

01:06:36,760 --> 01:06:50,150

[Music]

1558

01:06:55,430 --> 01:06:53,270

all right welcome back fade to black

1559

01:06:57,430 --> 01:06:55,440

kicking off this week tonight deep

1560

01:07:00,710 --> 01:06:57,440

prasad is here tomorrow night

1561

01:07:02,870 --> 01:07:00,720

jay widener wednesday night carolyn ford

1562

01:07:04,150 --> 01:07:02,880

thursday night vader night open lines

1563

01:07:06,150 --> 01:07:04,160

all night long

1564

01:07:07,990 --> 01:07:06,160

tonight me versailles we are discussing

1565

01:07:08,309 --> 01:07:08,000

how to apply modern science and physics

1566

01:07:10,390 --> 01:07:08,319

to

1567

01:07:11,510 --> 01:07:10,400

all of the known and unknown data when

1568

01:07:13,109 --> 01:07:11,520

it comes to

1569

01:07:16,390 --> 01:07:13,119

investigating and researching

1570

01:07:19,430 --> 01:07:16,400

extraterrestrial intelligence ufos uaps

1571

01:07:22,470 --> 01:07:19,440

now uaos now deep

1572

01:07:23,190 --> 01:07:22,480

uh we're going to get to uh structural

1573

01:07:25,990 --> 01:07:23,200

realism

1574

01:07:27,670 --> 01:07:26,000

uh here in a second uh but i want to

1575

01:07:28,069 --> 01:07:27,680

actually respond and i know that you're

1576

01:07:29,589 --> 01:07:28,079

hanging

1577

01:07:31,190 --> 01:07:29,599

out on twitter you can see what's going

1578

01:07:33,270 --> 01:07:31,200

on kim uh

1579

01:07:35,349 --> 01:07:33,280

just posted this question and i think

1580

01:07:38,870 --> 01:07:35,359

it's an excellent one

1581

01:07:41,990 --> 01:07:38,880

she says uh uh can you give us

1582

01:07:45,589 --> 01:07:42,000

a layperson's version of sean

1583

01:07:48,950 --> 01:07:45,599

carroll's multiverse theory and it

1584

01:07:51,750 --> 01:07:48,960

and even i think even sean

1585

01:07:52,470 --> 01:07:51,760

struggles with it at times because it

1586

01:07:56,150 --> 01:07:52,480

gets

1587

01:07:57,109 --> 01:07:56,160

way out there um and it's it's hard for

1588

01:08:00,309 --> 01:07:57,119

people to

1589

01:08:03,430 --> 01:08:00,319

accept what the physics

1590

01:08:05,589 --> 01:08:03,440

is suggesting here um but

1591

01:08:07,109 --> 01:08:05,599

let's let's take a crack at it i really

1592

01:08:12,069 --> 01:08:07,119

enjoy this subject

1593

01:08:15,829 --> 01:08:14,789

sure so uh i first of all i love that

1594

01:08:19,030 --> 01:08:15,839

question

1595

01:08:21,430 --> 01:08:19,040

um it all stems from

1596

01:08:22,829 --> 01:08:21,440

we have to go all the way back to the

1597

01:08:26,309 --> 01:08:22,839

early

1598

01:08:29,430 --> 01:08:26,319

1900s when quantum mechanics was

1599

01:08:33,110 --> 01:08:29,440

being sort of formed and discovered

1600

01:08:37,669 --> 01:08:33,120

by the fathers right werner heisenberg

1601
01:08:41,669 --> 01:08:37,679
bore einstein irwin schrodinger

1602
01:08:43,430 --> 01:08:41,679
paul dirac and many other people and

1603
01:08:45,749 --> 01:08:43,440
one of the things that you know they

1604
01:08:46,229 --> 01:08:45,759
agreed on was mathematical structure

1605
01:08:47,669 --> 01:08:46,239
right

1606
01:08:49,430 --> 01:08:47,679
that's why quantum mechanics is

1607
01:08:51,430 --> 01:08:49,440
successful because

1608
01:08:52,550 --> 01:08:51,440
it actually has make successful

1609
01:08:55,829 --> 01:08:52,560
predictions

1610
01:08:58,870 --> 01:08:55,839
based on

1611
01:09:02,510 --> 01:08:58,880
on hardcore math um but what was

1612
01:09:03,749 --> 01:09:02,520
very uh sort of subjective was the

1613
01:09:06,630 --> 01:09:03,759

interpretation

1614

01:09:09,749 --> 01:09:06,640
of what that math said about the

1615

01:09:12,390 --> 01:09:09,759
underlying nature of reality itself

1616

01:09:13,189 --> 01:09:12,400
um and so that's where the multiverse

1617

01:09:15,189 --> 01:09:13,199
comes in

1618

01:09:16,229 --> 01:09:15,199
and the whole idea of the multiverse

1619

01:09:19,829 --> 01:09:16,239
interpretation

1620

01:09:20,149 --> 01:09:19,839
and and hypothesis uh in the many worlds

1621

01:09:23,430 --> 01:09:20,159
uh

1622

01:09:24,309 --> 01:09:23,440
interpretation all that stuff um it all

1623

01:09:27,590 --> 01:09:24,319
stems from

1624

01:09:31,510 --> 01:09:27,600
the idea of the wave function uh

1625

01:09:34,550 --> 01:09:31,520
and so basically in in quantum mechanics

1626

01:09:37,590 --> 01:09:34,560

when we want to describe

1627

01:09:38,390 --> 01:09:37,600

the state of a system right a quantum

1628

01:09:40,550 --> 01:09:38,400

state

1629

01:09:42,630 --> 01:09:40,560

mathematically what people will say is

1630

01:09:43,990 --> 01:09:42,640

oh that's a ray in the complex hilbert

1631

01:09:45,349 --> 01:09:44,000

space right it's a two to the n

1632

01:09:47,990 --> 01:09:45,359

dimensional

1633

01:09:49,030 --> 01:09:48,000

uh in the two num to the end of metro

1634

01:09:52,550 --> 01:09:49,040

hilbert's space

1635

01:09:56,229 --> 01:09:52,560

but um physically though right uh

1636

01:09:58,870 --> 01:09:56,239

the the crazy part is that we can only

1637

01:09:59,750 --> 01:09:58,880

describe whatever it is that we can

1638

01:10:03,110 --> 01:09:59,760

measure

1639

01:10:03,430 --> 01:10:03,120

but we can't describe uh with any kind

1640

01:10:06,149 --> 01:10:03,440

of

1641

01:10:08,070 --> 01:10:06,159

math exactly what is happening when

1642

01:10:11,590 --> 01:10:08,080

something when a quantum state

1643

01:10:14,950 --> 01:10:11,600

is in a superposition so when

1644

01:10:18,310 --> 01:10:14,960

you have a wave function right that

1645

01:10:19,910 --> 01:10:18,320

is uh that describes a a true quantum

1646

01:10:21,510 --> 01:10:19,920

state right something that is in a

1647

01:10:25,510 --> 01:10:21,520

superposition

1648

01:10:28,390 --> 01:10:25,520

that is a a very fascinating

1649

01:10:29,270 --> 01:10:28,400

uh problem because in the end of day

1650

01:10:31,590 --> 01:10:29,280

what we're saying

1651

01:10:33,669 --> 01:10:31,600

is that all measurements all

1652

01:10:36,550 --> 01:10:33,679

measurements related quantum system

1653

01:10:38,470 --> 01:10:36,560

all measurables and observables are

1654

01:10:39,270 --> 01:10:38,480

defined by the wave function right the

1655

01:10:41,910 --> 01:10:39,280

wave function

1656

01:10:42,950 --> 01:10:41,920

defines the probability amplitudes so

1657

01:10:47,030 --> 01:10:42,960

basically

1658

01:10:49,030 --> 01:10:47,040

what we know for fact is the probability

1659

01:10:51,189 --> 01:10:49,040

of measuring something for a given

1660

01:10:54,229 --> 01:10:51,199

measurable encode by the way function

1661

01:10:57,669 --> 01:10:54,239

but we can never know for sure what uh

1662

01:11:01,270 --> 01:10:57,679

outcome we will get right so so uh

1663

01:11:03,430 --> 01:11:01,280

what happened is this argument ensued

1664

01:11:04,709 --> 01:11:03,440

about the nature of the collapse of the

1665

01:11:07,189 --> 01:11:04,719

wave function

1666

01:11:08,390 --> 01:11:07,199

right so what we all agree on is the

1667

01:11:10,790 --> 01:11:08,400

measurables

1668

01:11:12,149 --> 01:11:10,800

but um some people will say that the

1669

01:11:14,470 --> 01:11:12,159

wave function

1670

01:11:15,270 --> 01:11:14,480

which um and and we'll describe think of

1671

01:11:18,310 --> 01:11:15,280

it i

1672

01:11:21,189 --> 01:11:18,320

i don't want to like uh

1673

01:11:21,830 --> 01:11:21,199

you know describe it in such a way that

1674

01:11:23,990 --> 01:11:21,840

people

1675

01:11:25,430 --> 01:11:24,000

get the wrong visual picture it's very

1676

01:11:27,189 --> 01:11:25,440

important to have the right

1677

01:11:28,550 --> 01:11:27,199

visual picture when it comes to this

1678

01:11:31,590 --> 01:11:28,560

stuff so

1679

01:11:33,750 --> 01:11:31,600

so when i say wave function um

1680

01:11:34,790 --> 01:11:33,760

i think that what we should really do is

1681

01:11:36,390 --> 01:11:34,800

look at the

1682

01:11:38,709 --> 01:11:36,400

go back to the whole double slit

1683

01:11:39,750 --> 01:11:38,719

experiment it's really like commonly

1684

01:11:42,310 --> 01:11:39,760

used for a reason

1685

01:11:44,470 --> 01:11:42,320

and that's because that's sort of the

1686

01:11:45,990 --> 01:11:44,480

the most comprehensive experiment that

1687

01:11:47,830 --> 01:11:46,000

you can do that sort of

1688

01:11:49,350 --> 01:11:47,840

encompasses all the weirdness of quantum

1689

01:11:51,270 --> 01:11:49,360

mechanics including

1690

01:11:52,950 --> 01:11:51,280

the fact that the wave function even

1691

01:11:56,229 --> 01:11:52,960

exists in the first place

1692

01:11:58,709 --> 01:11:56,239

so so so so so uh right so like

1693

01:12:00,229 --> 01:11:58,719

uh typically um the whole point with

1694

01:12:02,709 --> 01:12:00,239

that double slit experiment

1695

01:12:03,590 --> 01:12:02,719

is that when you fire just a single

1696

01:12:06,229 --> 01:12:03,600

particle

1697

01:12:06,630 --> 01:12:06,239

let's say electron uh it should just

1698

01:12:08,550 --> 01:12:06,640

stay

1699

01:12:10,229 --> 01:12:08,560

as one single particle and go through

1700

01:12:12,390 --> 01:12:10,239

just one single slit

1701
01:12:14,470 --> 01:12:12,400
yet for one for some reason when you're

1702
01:12:16,470 --> 01:12:14,480
not making a measurement

1703
01:12:18,950 --> 01:12:16,480
on the system you're not measuring which

1704
01:12:22,070 --> 01:12:18,960
slit the electron went through

1705
01:12:23,590 --> 01:12:22,080
it behaves as if it was a wave that

1706
01:12:26,709 --> 01:12:23,600
collided with itself

1707
01:12:27,830 --> 01:12:26,719
that's where the whole um and so the

1708
01:12:32,229 --> 01:12:27,840
reason why that

1709
01:12:35,110 --> 01:12:32,239
is uh we can only infer from the math

1710
01:12:36,950 --> 01:12:35,120
right like we we don't we can only we

1711
01:12:39,830 --> 01:12:36,960
know the how we don't know the y's

1712
01:12:41,189 --> 01:12:39,840
so so the fact that it ends up as a wave

1713
01:12:44,070 --> 01:12:41,199

now by the way right that

1714

01:12:44,550 --> 01:12:44,080

that wave pattern is no surprise um

1715

01:12:46,870 --> 01:12:44,560

because

1716

01:12:47,669 --> 01:12:46,880

now we know that oh okay you can

1717

01:12:51,189 --> 01:12:47,679

describe that

1718

01:12:54,630 --> 01:12:51,199

using the wave function um aka

1719

01:12:57,510 --> 01:12:54,640

you can uh describe that by using

1720

01:12:59,110 --> 01:12:57,520

um you know complex analysis and

1721

01:13:02,229 --> 01:12:59,120

category theory

1722

01:13:04,950 --> 01:13:02,239

uh to describe that but but again

1723

01:13:05,990 --> 01:13:04,960

the actual behavior of why it is that

1724

01:13:08,550 --> 01:13:06,000

the particle

1725

01:13:10,229 --> 01:13:08,560

ends up being measured at the end as if

1726

01:13:12,709 --> 01:13:10,239

it behaved as a wave

1727

01:13:13,430 --> 01:13:12,719

that's up for debate so now enter sean

1728

01:13:19,750 --> 01:13:13,440

carroll

1729

01:13:23,110 --> 01:13:19,760

the particle acts as if it became a wave

1730

01:13:23,990 --> 01:13:23,120

version of itself and and collided with

1731

01:13:26,630 --> 01:13:24,000

itself

1732

01:13:28,070 --> 01:13:26,640

because mathematically it's very

1733

01:13:30,390 --> 01:13:28,080

intuitive it sounds simple

1734

01:13:32,229 --> 01:13:30,400

but but it's it's it's it's yeah it's

1735

01:13:34,950 --> 01:13:32,239

very uh interesting but

1736

01:13:36,470 --> 01:13:34,960

he's basically saying because the mac

1737

01:13:39,830 --> 01:13:36,480

describes

1738

01:13:40,310 --> 01:13:39,840

a particle you know moving and having

1739

01:13:42,390 --> 01:13:40,320

had to

1740

01:13:43,350 --> 01:13:42,400

behave like a wave and colliding with

1741

01:13:45,590 --> 01:13:43,360

itself

1742

01:13:46,390 --> 01:13:45,600

right uh basically saying that the wave

1743

01:13:48,870 --> 01:13:46,400

function is

1744

01:13:50,709 --> 01:13:48,880

real like he's he's saying that each

1745

01:13:52,070 --> 01:13:50,719

branch each possibility that the wave

1746

01:13:54,470 --> 01:13:52,080

function describes

1747

01:13:55,669 --> 01:13:54,480

is a physical reality right and we all

1748

01:13:59,350 --> 01:13:55,679

just live on different

1749

01:14:01,030 --> 01:13:59,360

um uh branches so he's basically saying

1750

01:14:02,709 --> 01:14:01,040

that the simplest way of interpreting

1751

01:14:05,590 --> 01:14:02,719

this wave-like behavior

1752

01:14:06,149 --> 01:14:05,600

is simply by assuming that there we

1753

01:14:09,189 --> 01:14:06,159

literally

1754

01:14:12,310 --> 01:14:09,199

wait live you know in this uh

1755

01:14:14,149 --> 01:14:12,320

reality let's call it a multiverse uh

1756

01:14:16,790 --> 01:14:14,159

where there's this one sort of wave

1757

01:14:19,110 --> 01:14:16,800

function that rules them all

1758

01:14:20,070 --> 01:14:19,120

uh and we all whenever we make a

1759

01:14:22,550 --> 01:14:20,080

measurement

1760

01:14:24,630 --> 01:14:22,560

all we're doing is just tapping into

1761

01:14:25,510 --> 01:14:24,640

that wave function we're on we're only

1762

01:14:28,709 --> 01:14:25,520

making

1763

01:14:30,229 --> 01:14:28,719

one we're just one instantiation of this

1764

01:14:31,990 --> 01:14:30,239

wave function

1765

01:14:33,270 --> 01:14:32,000

where we're making that measurement

1766

01:14:35,270 --> 01:14:33,280

right and so

1767

01:14:37,110 --> 01:14:35,280

that's the crazy part because in

1768

01:14:39,270 --> 01:14:37,120

classical physics in the day-to-day

1769

01:14:42,390 --> 01:14:39,280

world in the non-quantum world

1770

01:14:43,910 --> 01:14:42,400

objects only behave with definitive

1771

01:14:46,070 --> 01:14:43,920

characteristics they have

1772

01:14:47,350 --> 01:14:46,080

what what i would describe a definite

1773

01:14:50,470 --> 01:14:47,360

eigen state right

1774

01:14:52,709 --> 01:14:50,480

i would describe them using um so

1775

01:14:54,390 --> 01:14:52,719

so basically you know i only have one

1776

01:14:57,430 --> 01:14:54,400

pair of headphones it's not

1777

01:14:59,430 --> 01:14:57,440

it's not like i can't tell you exactly

1778

01:15:01,110 --> 01:14:59,440

where it is right or exactly let's see

1779

01:15:04,470 --> 01:15:01,120

how fast it's going

1780

01:15:07,750 --> 01:15:04,480

um so we have this sort of

1781

01:15:11,110 --> 01:15:07,760

a privilege in the classical world um

1782

01:15:14,070 --> 01:15:11,120

where we expect objects to behave uh

1783

01:15:15,669 --> 01:15:14,080

with definitive attributes and qualities

1784

01:15:18,870 --> 01:15:15,679

whereas in quantum mechanics

1785

01:15:20,790 --> 01:15:18,880

uh you know you you don't have that so

1786

01:15:22,630 --> 01:15:20,800

again uh sean carroll is trying to

1787

01:15:25,510 --> 01:15:22,640

describe

1788

01:15:26,550 --> 01:15:25,520

and explain part of that right and so it

1789

01:15:30,390 --> 01:15:26,560

all goes back

1790

01:15:32,709 --> 01:15:30,400

to the very fact that that you know

1791

01:15:33,750 --> 01:15:32,719

it it's very simple right an object when

1792

01:15:37,270 --> 01:15:33,760

fired

1793

01:15:38,870 --> 01:15:37,280

uh let's say uh at a wall right if i

1794

01:15:41,590 --> 01:15:38,880

throw a ball at a wall

1795

01:15:42,550 --> 01:15:41,600

and it bounces back uh it can only

1796

01:15:44,870 --> 01:15:42,560

bounce back

1797

01:15:46,709 --> 01:15:44,880

um with the same amount with the

1798

01:15:48,149 --> 01:15:46,719

conservative amount of force that i put

1799

01:15:49,189 --> 01:15:48,159

in through at the ball right the

1800

01:15:53,669 --> 01:15:49,199

conservation of

1801
01:15:54,630 --> 01:15:53,679
applies at most the ball cannot come

1802
01:15:57,189 --> 01:15:54,640
back at with me

1803
01:15:59,830 --> 01:15:57,199
at me with more power and speed than i

1804
01:16:02,390 --> 01:15:59,840
put into it when i threw it at the wall

1805
01:16:02,950 --> 01:16:02,400
um and so these are all classical

1806
01:16:05,590 --> 01:16:02,960
physics

1807
01:16:07,110 --> 01:16:05,600
intuitions but what's happening in the

1808
01:16:09,350 --> 01:16:07,120
quantum mechanics world right

1809
01:16:10,229 --> 01:16:09,360
is you're essentially throwing that ball

1810
01:16:11,990 --> 01:16:10,239
at the wall

1811
01:16:13,430 --> 01:16:12,000
and it's no longer going in the

1812
01:16:15,590 --> 01:16:13,440
direction you expect it

1813
01:16:17,910 --> 01:16:15,600

it's almost following this wave like

1814

01:16:20,390 --> 01:16:17,920

pattern when you're not measuring it

1815

01:16:22,470 --> 01:16:20,400

that's just so freaking weird right so

1816

01:16:25,030 --> 01:16:22,480

so basically sean is saying that yes

1817

01:16:25,910 --> 01:16:25,040

the the we kind of live in this wave

1818

01:16:27,510 --> 01:16:25,920

function

1819

01:16:30,070 --> 01:16:27,520

uh does that make sense and we can keep

1820

01:16:33,270 --> 01:16:30,080

going deeper but

1821

01:16:37,189 --> 01:16:33,280

and and to take it one step further

1822

01:16:41,189 --> 01:16:37,199

and especially for clarity is that

1823

01:16:41,590 --> 01:16:41,199

what sean is saying is that you have to

1824

01:16:44,870 --> 01:16:41,600

ex

1825

01:16:48,510 --> 01:16:44,880

if you accept the math the way it

1826

01:16:52,950 --> 01:16:48,520

is now that every

1827

01:16:56,470 --> 01:16:52,960

possibility exists and happens

1828

01:17:00,229 --> 01:16:56,480

our our world here where we are

1829

01:17:03,669 --> 01:17:00,239

is one instance of something happening

1830

01:17:06,550 --> 01:17:03,679

but every other possibility of

1831

01:17:08,149 --> 01:17:06,560

your decision your action whatever it

1832

01:17:11,590 --> 01:17:08,159

may be

1833

01:17:14,709 --> 01:17:11,600

also happens somewhere else

1834

01:17:16,630 --> 01:17:14,719

to the infinite and that is

1835

01:17:18,470 --> 01:17:16,640

the part that most people can't wrap

1836

01:17:21,510 --> 01:17:18,480

their head around

1837

01:17:23,750 --> 01:17:21,520

and it's the classical thing there is uh

1838

01:17:26,470 --> 01:17:23,760

you know i've heard sean say it and

1839

01:17:30,149 --> 01:17:26,480

and brian green and others say that well

1840

01:17:33,510 --> 01:17:30,159

in this world today i had a ham sandwich

1841

01:17:35,430 --> 01:17:33,520

and the next world i didn't right i had

1842

01:17:38,310 --> 01:17:35,440

one with cheese

1843

01:17:40,149 --> 01:17:38,320

and right and that that that's the part

1844

01:17:42,149 --> 01:17:40,159

of the fantastical

1845

01:17:43,510 --> 01:17:42,159

right the science fictional side of it

1846

01:17:45,910 --> 01:17:43,520

that where people just

1847

01:17:47,750 --> 01:17:45,920

kind of stopping oh wait a minute now

1848

01:17:52,149 --> 01:17:47,760

you're asking a bit too much

1849

01:17:55,350 --> 01:17:52,159

of us to to believe and to understand

1850

01:17:57,270 --> 01:17:55,360

what you are suggesting right

1851

01:17:59,030 --> 01:17:57,280

well well it's hard because like man

1852

01:18:01,830 --> 01:17:59,040

like as somebody who literally

1853

01:18:02,470 --> 01:18:01,840

uh does quantum computing research all

1854

01:18:05,830 --> 01:18:02,480

day

1855

01:18:07,990 --> 01:18:05,840

long like for a living uh i i am

1856

01:18:09,750 --> 01:18:08,000

constantly wondering where the hell is

1857

01:18:13,189 --> 01:18:09,760

all this quantum information stored

1858

01:18:16,310 --> 01:18:13,199

right like how where how does nature do

1859

01:18:18,229 --> 01:18:16,320

the bookkeeping like we exploit it we

1860

01:18:21,830 --> 01:18:18,239

know how to mathematically

1861

01:18:24,950 --> 01:18:21,840

do some very amazing things uh but

1862

01:18:27,750 --> 01:18:24,960

you know where is that right and cons

1863

01:18:28,229 --> 01:18:27,760

and so like that's like i i think like

1864

01:18:30,790 --> 01:18:28,239

sean

1865

01:18:31,669 --> 01:18:30,800

sense that you have to almost accept

1866

01:18:34,709 --> 01:18:31,679

that there are

1867

01:18:36,070 --> 01:18:34,719

other worlds out there uh when you start

1868

01:18:38,950 --> 01:18:36,080

thinking about these things

1869

01:18:40,550 --> 01:18:38,960

so yeah there's an intuitive way

1870

01:18:41,350 --> 01:18:40,560

basically is what i'm trying to get at

1871

01:18:44,149 --> 01:18:41,360

that you can

1872

01:18:45,430 --> 01:18:44,159

come to these conclusions uh from an

1873

01:18:48,310 --> 01:18:45,440

information science

1874

01:18:49,590 --> 01:18:48,320

perspective purely about the multiverse

1875

01:18:52,790 --> 01:18:49,600

now let's get back

1876

01:18:56,070 --> 01:18:52,800

to uh the structural realism

1877

01:18:59,189 --> 01:18:56,080

uh definition what is it gladly so

1878

01:19:02,470 --> 01:18:59,199

uh structural realism looks at

1879

01:19:06,470 --> 01:19:02,480

whether uh um or not um

1880

01:19:09,270 --> 01:19:06,480

the nature of reality is actually

1881

01:19:09,590 --> 01:19:09,280

inherently the way that math describes

1882

01:19:12,950 --> 01:19:09,600

it

1883

01:19:16,070 --> 01:19:12,960

right so so is there uh

1884

01:19:18,390 --> 01:19:16,080

basically a deeper um sort of

1885

01:19:19,510 --> 01:19:18,400

nature to reality that math can't

1886

01:19:22,790 --> 01:19:19,520

capture

1887

01:19:23,189 --> 01:19:22,800

um and so structural realists uh will

1888

01:19:26,870 --> 01:19:23,199

say

1889

01:19:28,950 --> 01:19:26,880

that that's not the case um and so

1890

01:19:30,790 --> 01:19:28,960

oh hold on hold on we gotta clean that

1891

01:19:35,750 --> 01:19:30,800

up a little bit

1892

01:19:42,310 --> 01:19:39,830

okay uh i i structural

1893

01:19:43,669 --> 01:19:42,320

realism let's let's see if we can get it

1894

01:19:45,510 --> 01:19:43,679

down to more real

1895

01:19:48,550 --> 01:19:45,520

uh you know talk to me like i'm five

1896

01:19:53,590 --> 01:19:51,910

sure okay sure so uh that's

1897

01:19:56,310 --> 01:19:53,600

that's an interesting uh challenge for

1898

01:19:59,350 --> 01:19:56,320

this but of course absolutely so

1899

01:20:01,189 --> 01:19:59,360

um okay let's try this again with

1900

01:20:03,030 --> 01:20:01,199

structural realism and let's assume

1901

01:20:05,510 --> 01:20:03,040

you're five-year-old we'll make it even

1902

01:20:07,830 --> 01:20:05,520

harder a five-year-old who has done

1903

01:20:09,189 --> 01:20:07,840

no mathematics whatsoever you just have

1904

01:20:12,790 --> 01:20:09,199

like an intuitive

1905

01:20:16,070 --> 01:20:12,800

uh idea of it um basically

1906

01:20:18,790 --> 01:20:16,080

structural realism in your case will say

1907

01:20:20,229 --> 01:20:18,800

uh is okay so i don't know if you know

1908

01:20:21,990 --> 01:20:20,239

this but you know when you jump from a

1909

01:20:22,790 --> 01:20:22,000

high distance like have you ever jumped

1910

01:20:26,310 --> 01:20:22,800

from let's say

1911

01:20:29,350 --> 01:20:26,320

uh a height of four feet or or any

1912

01:20:30,870 --> 01:20:29,360

only distance notice how your knees bend

1913

01:20:33,510 --> 01:20:30,880

like have you ever noticed that yeah you

1914

01:20:36,310 --> 01:20:33,520

just kind of bend uh and reduce okay

1915

01:20:37,270 --> 01:20:36,320

so that's really cool because what's

1916

01:20:41,110 --> 01:20:37,280

really happening

1917

01:20:41,669 --> 01:20:41,120

there is a very simple calculation for

1918

01:20:44,870 --> 01:20:41,679

power

1919

01:20:46,310 --> 01:20:44,880

is energy over time so the smaller

1920

01:20:48,870 --> 01:20:46,320

amount of time

1921

01:20:50,709 --> 01:20:48,880

uh you concentrate a higher amount of

1922

01:20:51,510 --> 01:20:50,719

energy the greater amount of power you

1923

01:20:54,470 --> 01:20:51,520

have

1924

01:20:54,950 --> 01:20:54,480

um and so when humans are falling from a

1925

01:20:57,590 --> 01:20:54,960

high

1926

01:20:58,149 --> 01:20:57,600

you know bit of ground when they when

1927

01:21:03,350 --> 01:20:58,159

they

1928

01:21:04,629 --> 01:21:03,360

immediately bending their knees to

1929

01:21:07,270 --> 01:21:04,639

increase the time

1930

01:21:07,990 --> 01:21:07,280

so increase the denominator and reduce

1931

01:21:10,950 --> 01:21:08,000

the power

1932

01:21:12,310 --> 01:21:10,960

so aka reduce the amount of force that's

1933

01:21:15,110 --> 01:21:12,320

felt on their body

1934

01:21:16,950 --> 01:21:15,120

right all in one go so our bodies

1935

01:21:18,310 --> 01:21:16,960

naturally do that kind of thing without

1936

01:21:21,750 --> 01:21:18,320

knowing this physics

1937

01:21:24,629 --> 01:21:21,760

calculation of p equals e over t um so

1938

01:21:25,590 --> 01:21:24,639

that is a scenario where let's say a

1939

01:21:28,550 --> 01:21:25,600

five-year-old

1940

01:21:29,110 --> 01:21:28,560

will probably know that math internally

1941

01:21:31,430 --> 01:21:29,120

too

1942

01:21:32,310 --> 01:21:31,440

right where the brain and so structural

1943

01:21:34,709 --> 01:21:32,320

realism

1944

01:21:35,430 --> 01:21:34,719

for five-year-olds is this did your

1945

01:21:38,950 --> 01:21:35,440

brain

1946

01:21:43,270 --> 01:21:38,960

learn to do that to to bend your knees

1947

01:21:43,990 --> 01:21:43,280

because there is a mathematical equation

1948

01:21:47,110 --> 01:21:44,000

some kind of

1949

01:21:47,590 --> 01:21:47,120

symbols that uh the universe follows

1950

01:21:50,950 --> 01:21:47,600

right

1951

01:21:53,430 --> 01:21:50,960

uh to the t or is it

1952

01:21:54,629 --> 01:21:53,440

something that it just kind of

1953

01:21:57,830 --> 01:21:54,639

understands

1954

01:21:59,030 --> 01:21:57,840

to mimic and emulate um and and that

1955

01:22:02,310 --> 01:21:59,040

there is no

1956

01:22:05,350 --> 01:22:02,320

uh truly uh real pattern there

1957

01:22:07,510 --> 01:22:05,360

we can only sort of closely understand

1958

01:22:09,669 --> 01:22:07,520

it and our brains and bodies are just

1959

01:22:11,189 --> 01:22:09,679

doing that just kind of guessing

1960

01:22:12,709 --> 01:22:11,199

at it now i wouldn't tell the

1961

01:22:14,470 --> 01:22:12,719

five-year-old what i mean by that is a

1962

01:22:17,270 --> 01:22:14,480

mathematical approximation

1963

01:22:17,669 --> 01:22:17,280

uh that is not structural realism but

1964

01:22:20,870 --> 01:22:17,679

but

1965

01:22:25,270 --> 01:22:20,880

structural realism

1966

01:22:27,350 --> 01:22:25,280

would say to the five-year-old

1967

01:22:28,790 --> 01:22:27,360

that uh you know a structural realist

1968

01:22:31,990 --> 01:22:28,800

will say that

1969

01:22:34,070 --> 01:22:32,000

um the brain um led you

1970

01:22:36,550 --> 01:22:34,080

you to bend your knees because it

1971

01:22:38,629 --> 01:22:36,560

understood and learned the true nature

1972

01:22:39,830 --> 01:22:38,639

of reality it actually understood the

1973

01:22:41,990 --> 01:22:39,840

true structure

1974

01:22:43,030 --> 01:22:42,000

of the universe mathematically because

1975

01:22:45,110 --> 01:22:43,040

math is

1976

01:22:47,030 --> 01:22:45,120

the true representation of the structure

1977

01:22:50,830 --> 01:22:47,040

of the universe

1978

01:22:53,990 --> 01:22:50,840

so how would this apply

1979

01:22:57,430 --> 01:22:54,000

uh with the study of et

1980

01:23:01,189 --> 01:22:57,440

technology and ufos

1981

01:23:04,709 --> 01:23:01,199

so uh this applies uh in the form

1982

01:23:07,830 --> 01:23:04,719

that um okay when we're looking

1983

01:23:10,390 --> 01:23:07,840

at other uaps

1984

01:23:11,189 --> 01:23:10,400

that let's say are coming from another

1985

01:23:13,590 --> 01:23:11,199

world

1986

01:23:15,590 --> 01:23:13,600

what we are going to be asking is

1987

01:23:18,950 --> 01:23:15,600

whether structural realism

1988

01:23:20,070 --> 01:23:18,960

uh is is the right way to go about the

1989

01:23:23,830 --> 01:23:20,080

world right

1990

01:23:26,310 --> 01:23:23,840

is is the best way to look at the world

1991

01:23:27,750 --> 01:23:26,320

where we kind of just look at the form

1992

01:23:31,030 --> 01:23:27,760

and the structure

1993

01:23:33,030 --> 01:23:31,040

right and and we kind of say uh

1994

01:23:34,790 --> 01:23:33,040

we either we take a heart stance we

1995

01:23:36,870 --> 01:23:34,800

decide that we say nothing

1996

01:23:38,709 --> 01:23:36,880

about the underlying nature of the

1997

01:23:41,990 --> 01:23:38,719

universe or we say

1998

01:23:45,030 --> 01:23:42,000

that math uh is truly something

1999

01:23:49,030 --> 01:23:45,040

um that is uh sort of objective

2000

01:23:52,070 --> 01:23:49,040

the i say this and it matters because

2001

01:23:55,350 --> 01:23:52,080

um if we're dealing with objects from

2002

01:23:56,390 --> 01:23:55,360

a different part of the universe uh what

2003

01:23:59,110 --> 01:23:56,400

who's to say

2004

01:24:00,149 --> 01:23:59,120

that math is not as useful in that part

2005

01:24:02,870 --> 01:24:00,159

of the universe

2006

01:24:04,709 --> 01:24:02,880

right it sounds weird but what if it's

2007

01:24:07,110 --> 01:24:04,719

less useful of approximation

2008

01:24:08,070 --> 01:24:07,120

no it doesn't sound weird to me at all

2009

01:24:10,149 --> 01:24:08,080

got it it does not

2010

01:24:11,110 --> 01:24:10,159

no let me tell you why it doesn't sound

2011

01:24:12,870 --> 01:24:11,120

weird

2012

01:24:14,830 --> 01:24:12,880

yeah and to anybody out there that wants

2013

01:24:18,229 --> 01:24:14,840

to be critical or suggest

2014

01:24:21,189 --> 01:24:18,239

otherwise yeah brian greene

2015

01:24:23,030 --> 01:24:21,199

i'm gonna paraphrase here sure but brian

2016

01:24:25,590 --> 01:24:23,040

green said this about e.t

2017

01:24:26,470 --> 01:24:25,600

arriving on planet earth he said so they

2018

01:24:28,790 --> 01:24:26,480

get here

2019

01:24:29,669 --> 01:24:28,800

and and we want to show them everything

2020

01:24:31,590 --> 01:24:29,679

that we know

2021

01:24:33,270 --> 01:24:31,600

and we're whipping out our science and

2022

01:24:34,790 --> 01:24:33,280

our physics and our math and our

2023

01:24:37,270 --> 01:24:34,800

calculations and

2024

01:24:38,629 --> 01:24:37,280

and the nuclear age and what we know and

2025

01:24:39,910 --> 01:24:38,639

they're going to look back at us and go

2026

01:24:41,910 --> 01:24:39,920

you know what

2027

01:24:44,070 --> 01:24:41,920

uh we did that math thing a long time

2028

01:24:47,189 --> 01:24:44,080

ago it's something that doesn't apply

2029

01:24:49,750 --> 01:24:47,199

to us now and he said it could be

2030

01:24:51,110 --> 01:24:49,760

just that we think that math is

2031

01:24:54,229 --> 01:24:51,120

universal that

2032

01:24:56,550 --> 01:24:54,239

math is is going to be the communi great

2033

01:24:59,750 --> 01:24:56,560

communicator across the universe

2034

01:25:02,070 --> 01:24:59,760

but we don't know that exactly

2035

01:25:04,229 --> 01:25:02,080

i think that's uh that's a fascinating

2036

01:25:06,790 --> 01:25:04,239

point that you just made uh brian greene

2037

01:25:08,390 --> 01:25:06,800

virtually said the exact same thing

2038

01:25:10,629 --> 01:25:08,400

we can't jump to those kinds of

2039

01:25:13,990 --> 01:25:10,639

conclusions

2040

01:25:16,229 --> 01:25:14,000

yeah no we can't uh it makes our tasks

2041

01:25:18,229 --> 01:25:16,239

harder as you know people who are let's

2042

01:25:20,629 --> 01:25:18,239

say researching ufos

2043

01:25:21,350 --> 01:25:20,639

right like how do you even begin to

2044

01:25:24,310 --> 01:25:21,360

understand

2045

01:25:26,229 --> 01:25:24,320

life that may not have been subject to

2046

01:25:26,790 --> 01:25:26,239

the same kinds of physics or even the

2047

01:25:29,590 --> 01:25:26,800

same

2048

01:25:31,030 --> 01:25:29,600

relationship with mathematics as we do

2049

01:25:32,470 --> 01:25:31,040

right like what does that even mean

2050

01:25:34,790 --> 01:25:32,480

right now from a

2051
01:25:35,590 --> 01:25:34,800
psychology perspective what does that

2052
01:25:38,070 --> 01:25:35,600
imply

2053
01:25:40,070 --> 01:25:38,080
uh to the way that something might think

2054
01:25:43,590 --> 01:25:40,080
about life and experience life

2055
01:25:46,950 --> 01:25:43,600
uh it just changes so many things now

2056
01:25:50,149 --> 01:25:46,960
so to simplify things if

2057
01:25:54,149 --> 01:25:50,159
uh it could be

2058
01:25:55,830 --> 01:25:54,159
and we need to continue applying the the

2059
01:25:57,830 --> 01:25:55,840
math to this but

2060
01:26:00,229 --> 01:25:57,840
it could be something as simple as i

2061
01:26:02,790 --> 01:26:00,239
mean if we have a craft

2062
01:26:04,310 --> 01:26:02,800
that there may not be any buttons or

2063
01:26:07,590 --> 01:26:04,320

switches or screens

2064

01:26:10,390 --> 01:26:07,600

or even a visual uh

2065

01:26:12,629 --> 01:26:10,400

tangible propulsion system the same

2066

01:26:15,430 --> 01:26:12,639

materials may be used

2067

01:26:15,990 --> 01:26:15,440

right the same metals the same physical

2068

01:26:19,430 --> 01:26:16,000

things

2069

01:26:22,070 --> 01:26:19,440

may be there but their

2070

01:26:23,669 --> 01:26:22,080

understanding of going from point a to

2071

01:26:26,390 --> 01:26:23,679

point b

2072

01:26:27,750 --> 01:26:26,400

has been simplified and refined to the

2073

01:26:30,950 --> 01:26:27,760

point where

2074

01:26:31,590 --> 01:26:30,960

they don't need those uh things on their

2075

01:26:33,750 --> 01:26:31,600

craft

2076

01:26:34,790 --> 01:26:33,760

and that is the great unknown it's much

2077

01:26:37,430 --> 01:26:34,800

more simpler

2078

01:26:38,950 --> 01:26:37,440

for them and we don't understand that

2079

01:26:42,070 --> 01:26:38,960

right

2080

01:26:45,669 --> 01:26:42,080

exactly that that's a

2081

01:26:48,790 --> 01:26:45,679

very uh real possibility um

2082

01:26:51,270 --> 01:26:48,800

there's a world where

2083

01:26:52,310 --> 01:26:51,280

you know we might have it's very

2084

01:26:55,430 --> 01:26:52,320

interesting like

2085

01:26:57,830 --> 01:26:55,440

we may have uh is it's interesting

2086

01:26:59,910 --> 01:26:57,840

uh for the fact by the way that in part

2087

01:27:00,629 --> 01:26:59,920

that bottles are also bought at this

2088

01:27:02,870 --> 01:27:00,639

point

2089

01:27:04,629 --> 01:27:02,880

uh that that you might just have

2090

01:27:06,550 --> 01:27:04,639

different species who have just

2091

01:27:07,270 --> 01:27:06,560

different advantages in terms of the

2092

01:27:09,830 --> 01:27:07,280

science

2093

01:27:11,189 --> 01:27:09,840

that they're predisposed to learning so

2094

01:27:14,550 --> 01:27:11,199

let's say that we

2095

01:27:16,070 --> 01:27:14,560

truly there does exist you know super

2096

01:27:19,750 --> 01:27:16,080

heavy elements that exist

2097

01:27:22,390 --> 01:27:19,760

in abundant resources and sources um in

2098

01:27:23,669 --> 01:27:22,400

abundant amounts sorry um and they do

2099

01:27:25,910 --> 01:27:23,679

have some sort of

2100

01:27:26,870 --> 01:27:25,920

you know gravity manipulation type

2101

01:27:28,229 --> 01:27:26,880

capabilities

2102

01:27:30,229 --> 01:27:28,239

and they exist naturally on other

2103

01:27:32,790 --> 01:27:30,239

planets then short those

2104

01:27:33,590 --> 01:27:32,800

uh those beings those intellectual

2105

01:27:36,310 --> 01:27:33,600

beings

2106

01:27:37,189 --> 01:27:36,320

will have an intuition for gravity-based

2107

01:27:40,709 --> 01:27:37,199

physics

2108

01:27:43,510 --> 01:27:40,719

that is way superior to ours right

2109

01:27:44,950 --> 01:27:43,520

but then uh flip side they may not have

2110

01:27:48,070 --> 01:27:44,960

the same understanding

2111

01:27:48,470 --> 01:27:48,080

of let's say general relativity uh

2112

01:27:52,229 --> 01:27:48,480

though

2113

01:27:54,870 --> 01:27:52,239

however

2114

01:27:55,350 --> 01:27:54,880

at the same time because the second that

2115

01:27:57,669 --> 01:27:55,360

you know

2116

01:28:00,070 --> 01:27:57,679

you're dealing with anything that's

2117

01:28:02,390 --> 01:28:00,080

disturbing or manipulating space time

2118

01:28:04,070 --> 01:28:02,400

you would have had to have run into

2119

01:28:06,870 --> 01:28:04,080

relativistic equations

2120

01:28:08,550 --> 01:28:06,880

like like especially if you have these

2121

01:28:10,390 --> 01:28:08,560

magical materials that are generating

2122

01:28:12,070 --> 01:28:10,400

gravitational waves and stuff like that

2123

01:28:13,750 --> 01:28:12,080

well you would have to yeah you've got

2124

01:28:15,510 --> 01:28:13,760

to evolve as a species

2125

01:28:17,030 --> 01:28:15,520

you know they've got to yeah they have

2126
01:28:18,629 --> 01:28:17,040
to have gone through everything that we

2127
01:28:21,270 --> 01:28:18,639
have gone through here

2128
01:28:22,790 --> 01:28:21,280
uh almost definitely i tend to believe

2129
01:28:23,669 --> 01:28:22,800
that and and that does go back to the

2130
01:28:28,390 --> 01:28:23,679
structural

2131
01:28:30,950 --> 01:28:28,400
and and whether the laws of the universe

2132
01:28:31,830 --> 01:28:30,960
are the same and all that jazz but yeah

2133
01:28:34,629 --> 01:28:31,840
yeah and i

2134
01:28:35,669 --> 01:28:34,639
always safely assume a couple of things

2135
01:28:38,629 --> 01:28:35,679
one

2136
01:28:39,430 --> 01:28:38,639
any intelligent species out there that's

2137
01:28:42,950 --> 01:28:39,440
advanced

2138
01:28:46,070 --> 01:28:42,960

beyond us did everything above

2139

01:28:49,350 --> 01:28:46,080

water in other words

2140

01:28:51,990 --> 01:28:49,360

you can't like europa

2141

01:28:54,070 --> 01:28:52,000

where you would have developed as a

2142

01:28:54,390 --> 01:28:54,080

species underwater well you could only

2143

01:28:57,910 --> 01:28:54,400

take

2144

01:29:00,470 --> 01:28:57,920

technology so far without fire

2145

01:29:01,030 --> 01:29:00,480

or heat so how much are you going to

2146

01:29:03,030 --> 01:29:01,040

evolve

2147

01:29:04,950 --> 01:29:03,040

you may have a brain but you're not

2148

01:29:05,669 --> 01:29:04,960

going to be able to develop a cell phone

2149

01:29:09,669 --> 01:29:05,679

in a car

2150

01:29:12,709 --> 01:29:09,679

in a highway system without fire

2151
01:29:13,430 --> 01:29:12,719
so you have to assume that any et

2152
01:29:16,709 --> 01:29:13,440
species

2153
01:29:18,149 --> 01:29:16,719
out there did it above ground and i know

2154
01:29:20,070 --> 01:29:18,159
it sounds crazy

2155
01:29:21,350 --> 01:29:20,080
but that's the way my brain works and it

2156
01:29:24,149 --> 01:29:21,360
has to be that way

2157
01:29:24,870 --> 01:29:24,159
i don't think an octopus would have

2158
01:29:28,070 --> 01:29:24,880
developed

2159
01:29:32,070 --> 01:29:28,080
beyond where it is now even though it's

2160
01:29:38,790 --> 01:29:35,270
i don't disagree with that at all uh

2161
01:29:40,950 --> 01:29:38,800
at least for now right um and so i

2162
01:29:42,149 --> 01:29:40,960
i think that yeah underwater is very

2163
01:29:44,629 --> 01:29:42,159

hard to do like

2164

01:29:45,830 --> 01:29:44,639

very good physics um there are

2165

01:29:48,870 --> 01:29:45,840

precedents right

2166

01:29:52,070 --> 01:29:48,880

like uh um isn't there

2167

01:29:53,590 --> 01:29:52,080

i actually um there is a specific kind

2168

01:29:55,270 --> 01:29:53,600

of shrimp i don't want to butcher the

2169

01:29:57,430 --> 01:29:55,280

name so i'm not even trying to guess

2170

01:29:59,830 --> 01:29:57,440

right uh there's like like times like a

2171

01:30:01,750 --> 01:29:59,840

kind of trip that can like snap his tail

2172

01:30:03,830 --> 01:30:01,760

uh if i recall correctly right and it

2173

01:30:06,310 --> 01:30:03,840

like it's at the speed of sound

2174

01:30:08,229 --> 01:30:06,320

uh which is really fascinating um

2175

01:30:11,189 --> 01:30:08,239

there's also the mantis shrimp

2176
01:30:11,590 --> 01:30:11,199
which is super cool the mantis shrimp uh

2177
01:30:14,070 --> 01:30:11,600
is

2178
01:30:15,990 --> 01:30:14,080
able to see much farther outside the

2179
01:30:19,669 --> 01:30:16,000
visible spectrum that we can

2180
01:30:23,030 --> 01:30:19,679
it can see uh like um it can see

2181
01:30:25,189 --> 01:30:23,040
infrared uh it has it's super cool

2182
01:30:26,870 --> 01:30:25,199
especially for the fact that it has

2183
01:30:30,310 --> 01:30:26,880
distributed computing

2184
01:30:31,030 --> 01:30:30,320
right so basically um our brains in the

2185
01:30:33,510 --> 01:30:31,040
way that we

2186
01:30:35,189 --> 01:30:33,520
see things we process it in a

2187
01:30:37,590 --> 01:30:35,199
centralized compute manner

2188
01:30:39,830 --> 01:30:37,600

where our brain is doing up much of the

2189

01:30:42,790 --> 01:30:39,840

processing right much of the visual

2190

01:30:44,390 --> 01:30:42,800

image recognition and whatnot whereas a

2191

01:30:47,590 --> 01:30:44,400

lot of the image recognition

2192

01:30:50,390 --> 01:30:47,600

computations will happen at the actual

2193

01:30:51,030 --> 01:30:50,400

eyes and cellular level of the mantis

2194

01:30:53,189 --> 01:30:51,040

shrimp

2195

01:30:54,950 --> 01:30:53,199

as opposed to having a centralized brain

2196

01:30:57,669 --> 01:30:54,960

for the visual processing

2197

01:30:58,709 --> 01:30:57,679

it's like decentralized across its eyes

2198

01:31:02,149 --> 01:30:58,719

super cool stuff

2199

01:31:03,430 --> 01:31:02,159

yeah that's fascinating and the the the

2200

01:31:06,629 --> 01:31:03,440

house fly

2201

01:31:09,750 --> 01:31:06,639

the fly right trip on this

2202

01:31:11,030 --> 01:31:09,760

the fly the reason why you cannot swat a

2203

01:31:14,310 --> 01:31:11,040

fly

2204

01:31:15,510 --> 01:31:14,320

is because they run in a world that is

2205

01:31:20,629 --> 01:31:15,520

600 times

2206

01:31:24,310 --> 01:31:20,639

slower than ours we are in slow motion

2207

01:31:28,070 --> 01:31:24,320

they see the swat coming

2208

01:31:31,270 --> 01:31:28,080

which for them it's like an hour right

2209

01:31:33,830 --> 01:31:31,280

and they just they just mosey on off

2210

01:31:34,790 --> 01:31:33,840

they are running in a different time

2211

01:31:36,390 --> 01:31:34,800

than we are

2212

01:31:38,229 --> 01:31:36,400

that's a trippy thing to think about

2213

01:31:39,110 --> 01:31:38,239

let's take a break right here our guest

2214

01:31:41,990 --> 01:31:39,120

tonight

2215

01:31:43,590 --> 01:31:42,000

is deep prasad we're gonna continue this

2216

01:31:45,510 --> 01:31:43,600

conversation

2217

01:31:47,430 --> 01:31:45,520

about how to apply modern science and

2218

01:31:49,990 --> 01:31:47,440

physics to the known and unknown data

2219

01:31:51,669 --> 01:31:50,000

when it comes to ufo research

2220

01:31:58,110 --> 01:31:51,679

this is faded black i'm yours jimmy

2221

01:32:10,950 --> 01:31:58,120

church stay with us

2222

01:32:17,189 --> 01:32:14,149

way out here we listen to jimmy church

2223

01:32:19,030 --> 01:32:17,199

you're listening to fade to black

2224

01:32:20,229 --> 01:32:19,040

always on the edge of the hottest

2225

01:32:24,830 --> 01:32:20,239

alternative talk

2226

01:32:39,030 --> 01:32:27,650

kgraradio.com

2227

01:32:43,189 --> 01:32:41,110

do you want to be an official fate or

2228

01:32:45,189 --> 01:32:43,199

not of course you do

2229

01:32:48,270 --> 01:32:45,199

this is jimmy church of fade to black

2230

01:32:50,629 --> 01:32:48,280

just go to our membership section at

2231

01:32:54,669 --> 01:32:50,639

jimmychurchradio.com

2232

01:32:57,030 --> 01:32:54,679

so you love talk radio then you'll love

2233

01:32:57,910 --> 01:32:57,040

talkstreamlive.com talk stream live is

2234

01:33:00,790 --> 01:32:57,920

always on

2235

01:33:02,790 --> 01:33:00,800

24 7 with the best streaming talk shows

2236

01:33:04,310 --> 01:33:02,800

find your favorite talkers and discover

2237

01:33:06,950 --> 01:33:04,320

some new ones it's free

2238

01:33:07,990 --> 01:33:06,960

readily available online or on mobile

2239

01:33:09,750 --> 01:33:08,000

with any smartphone

2240

01:33:12,149 --> 01:33:09,760

or tablet finding your favorite talk

2241

01:33:13,430 --> 01:33:12,159

shows all in one place has gotten a

2242

01:33:16,310 --> 01:33:13,440

whole lot easier

2243

01:33:18,470 --> 01:33:16,320

just go to talkstreamlive.com be sure to

2244

01:33:22,310 --> 01:33:18,480

download the free apps from google play

2245

01:33:25,830 --> 01:33:22,320

or the itunes app store you

2246

01:33:26,990 --> 01:33:25,840

listen to us and we listen to you and so

2247

01:33:30,070 --> 01:33:27,000

does the cia

2248

01:33:33,189 --> 01:33:30,080

[Music]

2249

01:33:35,750 --> 01:33:33,199

kg r a radio.com

2250

01:33:37,910 --> 01:33:35,760

telepath is a weekly digital newsletter

2251

01:33:40,310 --> 01:33:37,920

filled with the latest paranormal news

2252

01:33:42,149 --> 01:33:40,320

trending topics and fresh articles from

2253

01:33:44,149 --> 01:33:42,159

some of the most popular critical

2254

01:33:45,669 --> 01:33:44,159

thinkers in the community today

2255

01:33:48,229 --> 01:33:45,679

stay informed on your favorite

2256

01:33:49,110 --> 01:33:48,239

paranormal podcasts and live streaming

2257

01:33:51,030 --> 01:33:49,120

talk shows

2258

01:33:52,470 --> 01:33:51,040

interact with the telepath and upload

2259

01:33:54,470 --> 01:33:52,480

your paranormal story or

2260

01:33:55,669 --> 01:33:54,480

picks it could be featured in an

2261

01:33:58,149 --> 01:33:55,679

upcoming edition

2262

01:34:00,709 --> 01:33:58,159

sign up right now for the free telepath

2263

01:34:02,390 --> 01:34:00,719

newsletter at paranormal dot radio

2264

01:34:04,870 --> 01:34:02,400

that's paranormal dot

2265

01:34:06,229 --> 01:34:04,880

radio including the network you're

2266

01:34:09,110 --> 01:34:06,239

listening to right now

2267

01:34:09,669 --> 01:34:09,120

the paranormal radio app free in google

2268

01:34:13,830 --> 01:34:09,679

play

2269

01:34:20,709 --> 01:34:15,910

you are listening to fade to black with

2270

01:34:24,310 --> 01:34:23,030

oh hi i'm reece vance you're listening

2271

01:34:27,430 --> 01:34:24,320

to jimmy church

2272

01:34:28,790 --> 01:34:27,440

this is revolution the revolution will

2273

01:34:44,830 --> 01:34:28,800

not be televised

2274

01:35:14,709 --> 01:34:46,760

ciao

2275

01:35:16,709 --> 01:35:14,719

[Music]

2276

01:35:18,790 --> 01:35:16,719

all right welcome back fade to black

2277

01:35:21,109 --> 01:35:18,800

gavin just posted a picture in twitter

2278

01:35:22,310 --> 01:35:21,119

of a fly swatter saying explain this

2279

01:35:26,149 --> 01:35:22,320

then jimmy

2280

01:35:27,510 --> 01:35:26,159

that works about 10 of the time

2281

01:35:31,109 --> 01:35:27,520

how many times you have to swing that

2282

01:35:35,030 --> 01:35:31,119

thing you're not a hundred percent

2283

01:35:37,750 --> 01:35:35,040

oh no all right deeper side is our guess

2284

01:35:39,750 --> 01:35:37,760

and we're discussing how to apply modern

2285

01:35:41,270 --> 01:35:39,760

science and physics uh to the known and

2286

01:35:44,550 --> 01:35:41,280

unknown data about uh

2287

01:35:47,189 --> 01:35:44,560

uaps ufos e.t

2288

01:35:48,790 --> 01:35:47,199

and that's actually a direct question

2289

01:35:49,910 --> 01:35:48,800

and where we need to go to next deep

2290

01:35:53,109 --> 01:35:49,920

which is

2291

01:35:56,870 --> 01:35:53,119

how explain the process how do you apply

2292

01:36:01,030 --> 01:35:56,880

the data known and unknown

2293

01:36:01,990 --> 01:36:01,040

uh from e.t ufo siding whatever that

2294

01:36:05,109 --> 01:36:02,000

data may be

2295

01:36:08,830 --> 01:36:05,119

how do you apply that into

2296

01:36:10,229 --> 01:36:08,840

research and move forward how is that

2297

01:36:13,109 --> 01:36:10,239

done

2298

01:36:13,990 --> 01:36:13,119

so i it's a great question jimmy um

2299

01:36:16,550 --> 01:36:14,000

there's

2300

01:36:17,030 --> 01:36:16,560

i think two things that need to be done

2301
01:36:20,709 --> 01:36:17,040
um

2302
01:36:24,149 --> 01:36:20,719
one is of course the actual

2303
01:36:27,430 --> 01:36:24,159
mass gathering and congregation of data

2304
01:36:29,669 --> 01:36:27,440
and applying understood and well-known

2305
01:36:30,790 --> 01:36:29,679
uh machine learning and statistical

2306
01:36:33,830 --> 01:36:30,800
analysis

2307
01:36:34,149 --> 01:36:33,840
methods such as neural networks and even

2308
01:36:37,189 --> 01:36:34,159
like

2309
01:36:39,189 --> 01:36:37,199
logistic regression regression and

2310
01:36:41,350 --> 01:36:39,199
natural language processing and apply

2311
01:36:44,709 --> 01:36:41,360
the known techniques that we have

2312
01:36:47,510 --> 01:36:44,719
uh to um the the literature

2313
01:36:48,790 --> 01:36:47,520

like to all the historical texts to

2314

01:36:51,750 --> 01:36:48,800

anything that we think

2315

01:36:52,070 --> 01:36:51,760

is related to the phenomenon and see

2316

01:36:54,870 --> 01:36:52,080

what

2317

01:36:56,950 --> 01:36:54,880

patterns can they come up with that's

2318

01:36:58,550 --> 01:36:56,960

one thing that needs to be done

2319

01:37:00,470 --> 01:36:58,560

right and then there's the other thing

2320

01:37:03,590 --> 01:37:00,480

which is a fundamental

2321

01:37:07,109 --> 01:37:03,600

uh uh change and

2322

01:37:09,350 --> 01:37:07,119

and sort of advancement in our ability

2323

01:37:12,229 --> 01:37:09,360

to do artificial intelligence

2324

01:37:14,310 --> 01:37:12,239

so right now our artificial intelligence

2325

01:37:17,189 --> 01:37:14,320

is really good at mostly

2326

01:37:19,270 --> 01:37:17,199

narrow intelligence tasks so what i mean

2327

01:37:21,910 --> 01:37:19,280

by narrow intelligence is that

2328

01:37:22,870 --> 01:37:21,920

it's a task that doesn't require a lot

2329

01:37:25,830 --> 01:37:22,880

of outside

2330

01:37:26,390 --> 01:37:25,840

knowledge and and on-the-fly sort of

2331

01:37:29,430 --> 01:37:26,400

thinking

2332

01:37:31,430 --> 01:37:29,440

to accomplish so parking a car right

2333

01:37:34,629 --> 01:37:31,440

requires narrow intelligence

2334

01:37:37,910 --> 01:37:34,639

uh um talking about the philosophy

2335

01:37:39,109 --> 01:37:37,920

of life and metaphysics is not narrow

2336

01:37:42,709 --> 01:37:39,119

intelligence

2337

01:37:43,910 --> 01:37:42,719

so um uh we are still at the narrow

2338

01:37:47,910 --> 01:37:43,920

intelligence phase

2339

01:37:48,550 --> 01:37:47,920

and so when we want to apply ai methods

2340

01:37:51,830 --> 01:37:48,560

to

2341

01:37:54,470 --> 01:37:51,840

uh let's say um parsing

2342

01:37:56,870 --> 01:37:54,480

the data all the ufo data that we have

2343

01:37:59,189 --> 01:37:56,880

out there right the experimenter data

2344

01:38:00,629 --> 01:37:59,199

um and trying to find better patterns in

2345

01:38:03,030 --> 01:38:00,639

there and seeing

2346

01:38:03,910 --> 01:38:03,040

are there sort of these sort of

2347

01:38:07,430 --> 01:38:03,920

reasoning these

2348

01:38:09,510 --> 01:38:07,440

abstract logical patterns to be found

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01:38:11,350 --> 01:38:09,520

we may be able to find them through the

2350

01:38:13,910 --> 01:38:11,360

abstract abilities and learning

2351

01:38:15,830 --> 01:38:13,920

capabilities of today's infrastructure

2352

01:38:17,590 --> 01:38:15,840

which is something that people we barely

2353

01:38:18,709 --> 01:38:17,600

scratch the surface of right like using

2354

01:38:21,030 --> 01:38:18,719

machine learning

2355

01:38:21,990 --> 01:38:21,040

to to look through ufo data like some

2356

01:38:24,950 --> 01:38:22,000

people are

2357

01:38:26,390 --> 01:38:24,960

have started doing it um but very few

2358

01:38:30,070 --> 01:38:26,400

tangible results out there

2359

01:38:31,910 --> 01:38:30,080

so far um but yeah so so you have that

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01:38:35,350 --> 01:38:31,920

and then you yeah you really just need

2361

01:38:38,390 --> 01:38:35,360

this uh advanced imagine if you had

2362

01:38:42,390 --> 01:38:38,400

a sort of quantum enhanced reasoning

2363

01:38:46,070 --> 01:38:42,400

engine instead that was able to

2364

01:38:47,189 --> 01:38:46,080

um understand and find more abstract

2365

01:38:49,830 --> 01:38:47,199

patterns

2366

01:38:50,629 --> 01:38:49,840

uh semantically speaking and culturally

2367

01:38:53,350 --> 01:38:50,639

speaking and

2368

01:38:54,870 --> 01:38:53,360

intellectually speaking than the average

2369

01:38:56,629 --> 01:38:54,880

sort of machine learning analysis

2370

01:38:59,510 --> 01:38:56,639

approach that we use today

2371

01:39:00,709 --> 01:38:59,520

there should be such approaches um we

2372

01:39:05,350 --> 01:39:00,719

just need to find them

2373

01:39:08,709 --> 01:39:05,360

well okay then there is the

2374

01:39:10,550 --> 01:39:08,719

the practical stuff is there is there an

2375

01:39:13,990 --> 01:39:10,560

application today

2376

01:39:16,229 --> 01:39:14,000

where i and i'm speaking actually in a

2377

01:39:18,629 --> 01:39:16,239

literal sense too as well

2378

01:39:19,590 --> 01:39:18,639

is there an application today where you

2379

01:39:22,629 --> 01:39:19,600

could take

2380

01:39:25,270 --> 01:39:22,639

a the color of uh

2381

01:39:27,030 --> 01:39:25,280

of a known that was seen certainly that

2382

01:39:30,390 --> 01:39:27,040

signature would say something

2383

01:39:31,510 --> 01:39:30,400

you would have a position right you

2384

01:39:32,629 --> 01:39:31,520

would have that you would have a

2385

01:39:36,070 --> 01:39:32,639

location

2386

01:39:39,270 --> 01:39:36,080

you would have maybe an a and b

2387

01:39:41,109 --> 01:39:39,280

location where it was seen at two points

2388

01:39:43,669 --> 01:39:41,119

in the sky traveling

2389

01:39:44,550 --> 01:39:43,679

um you have the disappearance or the

2390

01:39:47,750 --> 01:39:44,560

appearance

2391

01:39:48,709 --> 01:39:47,760

that's another variable uh you have a

2392

01:39:51,750 --> 01:39:48,719

height

2393

01:39:54,629 --> 01:39:51,760

right you have all

2394

01:39:55,109 --> 01:39:54,639

so you could develop certain things from

2395

01:40:02,550 --> 01:39:55,119

that

2396

01:40:05,750 --> 01:40:02,560

to start understanding the physics yes

2397

01:40:07,350 --> 01:40:05,760

absolutely yeah absolutely it can uh so

2398

01:40:09,990 --> 01:40:07,360

what you just described

2399

01:40:10,390 --> 01:40:10,000

is basically the basis of the training

2400

01:40:13,430 --> 01:40:10,400

set

2401

01:40:16,950 --> 01:40:13,440

right now we don't know for for

2402

01:40:17,669 --> 01:40:16,960

for what we would want uh to use that as

2403

01:40:20,709 --> 01:40:17,679

a training

2404

01:40:23,109 --> 01:40:20,719

set of um um you would think

2405

01:40:24,950 --> 01:40:23,119

but actually like it's uh it's not the

2406

01:40:27,350 --> 01:40:24,960

case anymore like let's say

2407

01:40:29,109 --> 01:40:27,360

uh 50 years ago somebody might have said

2408

01:40:31,030 --> 01:40:29,119

i don't know what to do with this data

2409

01:40:32,390 --> 01:40:31,040

right even 20 years ago somebody could

2410

01:40:35,270 --> 01:40:32,400

have said that but

2411

01:40:36,470 --> 01:40:35,280

now we know that with the advent and

2412

01:40:38,709 --> 01:40:36,480

access to

2413

01:40:40,310 --> 01:40:38,719

high performance compute power right

2414

01:40:43,189 --> 01:40:40,320

having gpus

2415

01:40:44,870 --> 01:40:43,199

having access to very powerful machines

2416

01:40:47,270 --> 01:40:44,880

to train our neural networks

2417

01:40:48,950 --> 01:40:47,280

what you could start doing is at least

2418

01:40:51,990 --> 01:40:48,960

making predictions

2419

01:40:54,790 --> 01:40:52,000

on uh what positions what

2420

01:40:56,709 --> 01:40:54,800

where uh the next signings will be who

2421

01:40:59,030 --> 01:40:56,719

the next experimenter

2422

01:40:59,910 --> 01:40:59,040

might be right that is something that i

2423

01:41:01,830 --> 01:40:59,920

think we

2424

01:41:03,590 --> 01:41:01,840

it might sound crazy but it is something

2425

01:41:06,149 --> 01:41:03,600

we might just be able to do

2426

01:41:06,629 --> 01:41:06,159

uh today i wouldn't doubt it if given

2427

01:41:09,990 --> 01:41:06,639

the right

2428

01:41:13,350 --> 01:41:10,000

data um we may be actually able to

2429

01:41:16,629 --> 01:41:13,360

you know not only just figure out uh

2430

01:41:18,470 --> 01:41:16,639

let's say common times to expect uh to

2431

01:41:20,950 --> 01:41:18,480

see the phenomena or how to

2432

01:41:22,629 --> 01:41:20,960

how it may express itself but we may

2433

01:41:26,229 --> 01:41:22,639

actually be able to

2434

01:41:29,350 --> 01:41:26,239

reverse engineer uh the human

2435

01:41:32,470 --> 01:41:29,360

selection process that's being uh

2436

01:41:35,270 --> 01:41:32,480

sort of undergone right now or or

2437

01:41:35,910 --> 01:41:35,280

or undergoing at the moment so yeah and

2438

01:41:39,270 --> 01:41:35,920

underway

2439

01:41:42,470 --> 01:41:39,280

does that make sense well it does

2440

01:41:44,790 --> 01:41:42,480

and it seems to me that

2441

01:41:46,870 --> 01:41:44,800

there should be and i hope this is

2442

01:41:48,870 --> 01:41:46,880

exactly what you're working on

2443

01:41:50,310 --> 01:41:48,880

where you would be able to open up a

2444

01:41:52,790 --> 01:41:50,320

program and

2445

01:41:53,669 --> 01:41:52,800

you have a sighting right with friends

2446

01:41:57,030 --> 01:41:53,679

whatever

2447

01:41:58,070 --> 01:41:57,040

and you are able to plug in everything

2448

01:42:01,590 --> 01:41:58,080

that you know

2449

01:42:04,790 --> 01:42:01,600

sighting and

2450

01:42:06,550 --> 01:42:04,800

and get that in and maybe uh video

2451
01:42:08,070 --> 01:42:06,560
and upload that too as well but then

2452
01:42:10,950 --> 01:42:08,080
have that

2453
01:42:11,910 --> 01:42:10,960
data spit out some answers and be able

2454
01:42:14,709 --> 01:42:11,920
to analyze

2455
01:42:15,750 --> 01:42:14,719
things really really quickly and give a

2456
01:42:19,270 --> 01:42:15,760
scientific

2457
01:42:22,149 --> 01:42:19,280
response to it because if you have those

2458
01:42:25,189 --> 01:42:22,159
basic things in physics right you need

2459
01:42:29,430 --> 01:42:25,199
you need an object you need a mass

2460
01:42:31,590 --> 01:42:29,440
you need a location

2461
01:42:33,590 --> 01:42:31,600
those basic things that can go into

2462
01:42:35,830 --> 01:42:33,600
start the process

2463
01:42:37,990 --> 01:42:35,840

and that's what we need today we need

2464

01:42:40,950 --> 01:42:38,000

that kind of application

2465

01:42:41,830 --> 01:42:40,960

out there for for anybody to uh be able

2466

01:42:44,790 --> 01:42:41,840

to not

2467

01:42:46,790 --> 01:42:44,800

it's one thing to report a sighting but

2468

01:42:48,870 --> 01:42:46,800

nothing is done with that data

2469

01:42:50,950 --> 01:42:48,880

take it scientifically to the next step

2470

01:42:53,030 --> 01:42:50,960

deep

2471

01:42:54,629 --> 01:42:53,040

jimmy you can count on it that's all

2472

01:42:57,669 --> 01:42:54,639

i'll say

2473

01:43:01,350 --> 01:42:57,679

well exactly i mean i think we're we

2474

01:43:04,709 --> 01:43:01,360

we are right there there are so many

2475

01:43:08,070 --> 01:43:04,719

uh uh statements that are made by

2476

01:43:10,470 --> 01:43:08,080

physicists today which i find very very

2477

01:43:13,750 --> 01:43:10,480

interesting if we can

2478

01:43:17,510 --> 01:43:13,760

if we can scientifically analyze

2479

01:43:20,470 --> 01:43:17,520

the atmosphere of a planet

2480

01:43:22,070 --> 01:43:20,480

uh you know a thousand light years away

2481

01:43:23,270 --> 01:43:22,080

a million light years away and

2482

01:43:25,109 --> 01:43:23,280

scientifically go

2483

01:43:26,950 --> 01:43:25,119

okay this is the composition of that

2484

01:43:27,830 --> 01:43:26,960

atmosphere and we can't even see that

2485

01:43:31,189 --> 01:43:27,840

planet

2486

01:43:33,350 --> 01:43:31,199

but we are able to identify

2487

01:43:34,709 --> 01:43:33,360

uh get those key identifiers to its

2488

01:43:38,950 --> 01:43:34,719

atmosphere

2489

01:43:41,990 --> 01:43:38,960

then why can't we apply that same logic

2490

01:43:43,750 --> 01:43:42,000

to sightings that we can't identify here

2491

01:43:48,870 --> 01:43:43,760

on our home planet i would

2492

01:43:55,990 --> 01:43:52,070

absolutely they they certainly

2493

01:43:59,350 --> 01:43:56,000

do um for example spectroscopy right so

2494

01:44:02,310 --> 01:43:59,360

we we we use a different spectroscopy

2495

01:44:03,350 --> 01:44:02,320

uh to determine uh whether there was

2496

01:44:05,990 --> 01:44:03,360

phosphine or not

2497

01:44:08,070 --> 01:44:06,000

in the atmosphere of venus compared to

2498

01:44:10,390 --> 01:44:08,080

the spectroscopy that we would use

2499

01:44:11,669 --> 01:44:10,400

uh for example inductively coupled

2500

01:44:14,470 --> 01:44:11,679

plasma

2501
01:44:15,189 --> 01:44:14,480
spectroscopy that we would use uh to

2502
01:44:18,709 --> 01:44:15,199
determine

2503
01:44:20,550 --> 01:44:18,719
if a debris of uap is actually

2504
01:44:23,830 --> 01:44:20,560
extraterrestrial or not

2505
01:44:25,590 --> 01:44:23,840
but in both cases you know we are

2506
01:44:27,270 --> 01:44:25,600
trying to understand sort of the

2507
01:44:30,149 --> 01:44:27,280
chemical composition

2508
01:44:32,390 --> 01:44:30,159
or reverse engineer the composition of

2509
01:44:35,030 --> 01:44:32,400
whatever it is that we're looking at

2510
01:44:35,430 --> 01:44:35,040
and uh that is something that is right

2511
01:44:38,870 --> 01:44:35,440
you know

2512
01:44:41,510 --> 01:44:38,880
upper alley um uh at reactive q

2513
01:44:43,910 --> 01:44:41,520

for example um you know one of our one

2514

01:44:44,550 --> 01:44:43,920

of my personal hopes uh for this company

2515

01:44:47,350 --> 01:44:44,560

is that

2516

01:44:48,629 --> 01:44:47,360

we'll provide the technology that will

2517

01:44:50,790 --> 01:44:48,639

feed into these ai

2518

01:44:51,750 --> 01:44:50,800

engines that can help us sort of

2519

01:44:54,310 --> 01:44:51,760

understand

2520

01:44:55,430 --> 01:44:54,320

uh the physics and the materials that

2521

01:44:57,910 --> 01:44:55,440

are being used

2522

01:44:59,510 --> 01:44:57,920

by uaps and you know what you're what

2523

01:45:01,189 --> 01:44:59,520

you're observing we want to be able to

2524

01:45:03,830 --> 01:45:01,199

shed some more light on to it

2525

01:45:06,229 --> 01:45:03,840

there are i'm not going to name names

2526

01:45:10,070 --> 01:45:06,239

but there are a few physicists out there

2527

01:45:13,669 --> 01:45:10,080

right now that say that they understand

2528

01:45:17,189 --> 01:45:13,679

the the physics behind the tic tac

2529

01:45:20,390 --> 01:45:17,199

just from the descriptions

2530

01:45:23,910 --> 01:45:20,400

from the pilots right and and

2531

01:45:25,990 --> 01:45:23,920

and and the uh very simple radar data

2532

01:45:27,270 --> 01:45:26,000

there isn't complicated radar data

2533

01:45:29,109 --> 01:45:27,280

there's only very simple

2534

01:45:31,590 --> 01:45:29,119

there isn't any radar data that shows

2535

01:45:34,390 --> 01:45:31,600

this the this thing traveling

2536

01:45:35,990 --> 01:45:34,400

60 000 feet in a second that that data

2537

01:45:36,790 --> 01:45:36,000

isn't there they have the data at the

2538

01:45:38,390 --> 01:45:36,800

top

2539

01:45:39,990 --> 01:45:38,400

data at the bottom and then they're

2540

01:45:40,870 --> 01:45:40,000

filling in the blanks but that being

2541

01:45:43,510 --> 01:45:40,880

said

2542

01:45:44,229 --> 01:45:43,520

can have you looked at some of this

2543

01:45:58,310 --> 01:45:44,239

research

2544

01:46:00,149 --> 01:45:58,320

done my very best uh to uh

2545

01:46:02,229 --> 01:46:00,159

actually work through the math right not

2546

01:46:04,070 --> 01:46:02,239

just like like just like give everybody

2547

01:46:05,590 --> 01:46:04,080

whoever there aren't that many of them

2548

01:46:07,270 --> 01:46:05,600

out there right in the community

2549

01:46:09,430 --> 01:46:07,280

with their own theories and i've given

2550

01:46:12,390 --> 01:46:09,440

all of them you know their own shot

2551
01:46:12,790 --> 01:46:12,400
and uh i think for what it's worth um

2552
01:46:15,910 --> 01:46:12,800
you know

2553
01:46:19,430 --> 01:46:15,920
nobody is even close uh

2554
01:46:20,550 --> 01:46:19,440
not even remotely close um and and i

2555
01:46:23,109 --> 01:46:20,560
know that that's gonna

2556
01:46:23,750 --> 01:46:23,119
you know hurt a lot of egos but the

2557
01:46:26,550 --> 01:46:23,760
simple

2558
01:46:27,430 --> 01:46:26,560
truth uh is obvious the proof is in the

2559
01:46:30,870 --> 01:46:27,440
pudding

2560
01:46:32,950 --> 01:46:30,880
uh if people had cracked you know the

2561
01:46:35,510 --> 01:46:32,960
physics of the tic tac

2562
01:46:36,109 --> 01:46:35,520
we would have even be been able to tell

2563
01:46:38,870 --> 01:46:36,119

you know

2564

01:46:40,070 --> 01:46:38,880

experimentally um and if we could not

2565

01:46:42,229 --> 01:46:40,080

tell experimentally

2566

01:46:43,910 --> 01:46:42,239

at least the physics should have been

2567

01:46:44,550 --> 01:46:43,920

consistent and the math should have been

2568

01:46:47,750 --> 01:46:44,560

legit

2569

01:46:50,550 --> 01:46:47,760

logically consistent and complete and

2570

01:46:50,950 --> 01:46:50,560

uh and that just has not been the case

2571

01:46:53,830 --> 01:46:50,960

right

2572

01:46:54,470 --> 01:46:53,840

like nobody has proved because like they

2573

01:46:57,510 --> 01:46:54,480

would win

2574

01:46:59,750 --> 01:46:57,520

uh they would be in the contender

2575

01:47:01,990 --> 01:46:59,760

contending at least for winning a nobel

2576

01:47:03,910 --> 01:47:02,000

prize if somebody for example could find

2577

01:47:07,030 --> 01:47:03,920

a more accurate theory

2578

01:47:08,790 --> 01:47:07,040

um of of physics just a better more

2579

01:47:11,750 --> 01:47:08,800

accurate model physics

2580

01:47:12,550 --> 01:47:11,760

um that can describe the tic tac uh that

2581

01:47:14,390 --> 01:47:12,560

naturally

2582

01:47:16,310 --> 01:47:14,400

you know does it or if anybody could

2583

01:47:17,350 --> 01:47:16,320

figure out how to use today's physics to

2584

01:47:20,390 --> 01:47:17,360

do it

2585

01:47:22,149 --> 01:47:20,400

um uh there's yeah the point though is

2586

01:47:24,550 --> 01:47:22,159

that nobody has cracked it it

2587

01:47:25,830 --> 01:47:24,560

and and the physicist who is right for

2588

01:47:29,189 --> 01:47:25,840

what it's worth

2589

01:47:31,990 --> 01:47:29,199

will eventually be known you know

2590

01:47:34,229 --> 01:47:32,000

uh for being right like i know it sounds

2591

01:47:36,470 --> 01:47:34,239

really stupid and obvious to say

2592

01:47:37,669 --> 01:47:36,480

right um but like like the entire

2593

01:47:40,229 --> 01:47:37,679

community didn't keep

2594

01:47:41,350 --> 01:47:40,239

calling einstein crackpot forever right

2595

01:47:43,750 --> 01:47:41,360

he was called you

2596

01:47:45,270 --> 01:47:43,760

they realized he was on to something

2597

01:47:47,830 --> 01:47:45,280

pretty damn quickly

2598

01:47:48,709 --> 01:47:47,840

uh it took a while like for the big

2599

01:47:51,350 --> 01:47:48,719

older

2600

01:47:52,709 --> 01:47:51,360

guys to kind of like accept his stuff

2601

01:47:54,629 --> 01:47:52,719

right because that's because they're

2602

01:47:56,390 --> 01:47:54,639

you know positions were threatened but

2603

01:47:57,109 --> 01:47:56,400

the rest of the world the the other

2604

01:47:59,030 --> 01:47:57,119

physicists

2605

01:48:00,470 --> 01:47:59,040

engineers and stuff they're like oh crap

2606

01:48:03,189 --> 01:48:00,480

this map is just better

2607

01:48:03,990 --> 01:48:03,199

it's more accurate and and these uh

2608

01:48:05,990 --> 01:48:04,000

physicists who

2609

01:48:07,750 --> 01:48:06,000

have claimed to have cracked the tic tac

2610

01:48:10,229 --> 01:48:07,760

have produced no such thing

2611

01:48:11,030 --> 01:48:10,239

and not come close that's my yeah that's

2612

01:48:15,109 --> 01:48:11,040

my read on it

2613

01:48:18,709 --> 01:48:15,119

well and the uh could you

2614

01:48:20,070 --> 01:48:18,719

and have you looked at the observational

2615

01:48:22,470 --> 01:48:20,080

data

2616

01:48:23,669 --> 01:48:22,480

and what little measurements we do have

2617

01:48:26,870 --> 01:48:23,679

by the way

2618

01:48:29,510 --> 01:48:26,880

of of the tic tac and try

2619

01:48:32,070 --> 01:48:29,520

to make the math work have you done the

2620

01:48:34,870 --> 01:48:32,080

same thing

2621

01:48:35,669 --> 01:48:34,880

i have jimmy and and i tried to do it in

2622

01:48:38,390 --> 01:48:35,679

a way that

2623

01:48:39,109 --> 01:48:38,400

wasn't sort of sneaky and speculative

2624

01:48:41,750 --> 01:48:39,119

for example

2625

01:48:43,030 --> 01:48:41,760

i didn't try to say let's assume we can

2626

01:48:45,830 --> 01:48:43,040

build a warp drive

2627

01:48:47,430 --> 01:48:45,840

right i assumed let's assume that we

2628

01:48:49,910 --> 01:48:47,440

only have access to the kinds of

2629

01:48:52,310 --> 01:48:49,920

combustion engines and the technologies

2630

01:48:53,109 --> 01:48:52,320

that we more or less have today and

2631

01:48:55,350 --> 01:48:53,119

maybe advanced

2632

01:48:57,350 --> 01:48:55,360

a little bit right 50 years whatever but

2633

01:48:58,149 --> 01:48:57,360

fundamental physics perspective let's

2634

01:49:00,229 --> 01:48:58,159

assume

2635

01:49:01,430 --> 01:49:00,239

we there is no better physics that we

2636

01:49:04,870 --> 01:49:01,440

ourselves can deal with

2637

01:49:07,510 --> 01:49:04,880

right um and and and

2638

01:49:08,229 --> 01:49:07,520

my my most conservative calculation that

2639

01:49:12,149 --> 01:49:08,239

i found

2640

01:49:15,430 --> 01:49:12,159

was that in order to achieve the same

2641

01:49:18,550 --> 01:49:15,440

uh um at velocity as

2642

01:49:23,030 --> 01:49:18,560

the tic tac we would need

2643

01:49:25,990 --> 01:49:23,040

at least 6 000 spacex falcon 9 rockets

2644

01:49:27,589 --> 01:49:26,000

um you know combined into one uh so and

2645

01:49:30,709 --> 01:49:27,599

that's just never going to happen

2646

01:49:31,109 --> 01:49:30,719

um and so so i realized pretty quickly

2647

01:49:33,830 --> 01:49:31,119

that

2648

01:49:35,189 --> 01:49:33,840

using our physics our quantum mechanics

2649

01:49:37,910 --> 01:49:35,199

and general relativity

2650

01:49:39,910 --> 01:49:37,920

and what we know um and what what is

2651

01:49:41,990 --> 01:49:39,920

possible based on that physics

2652

01:49:44,470 --> 01:49:42,000

and technologies it just i couldn't make

2653

01:49:47,830 --> 01:49:44,480

it work i could not and that's just why

2654

01:49:50,149 --> 01:49:47,840

you know that that's why i i believe

2655

01:49:50,950 --> 01:49:50,159

uh the lockheed martins of the world and

2656

01:49:53,510 --> 01:49:50,960

all these

2657

01:49:55,030 --> 01:49:53,520

billion dollar uh tech and aerospace

2658

01:49:57,510 --> 01:49:55,040

companies are still

2659

01:49:58,149 --> 01:49:57,520

you know moving around in gas-powered

2660

01:50:00,629 --> 01:49:58,159

rockets

2661

01:50:03,109 --> 01:50:00,639

and and planes and vehicles it's because

2662

01:50:06,790 --> 01:50:03,119

humans just have yet to dominate

2663

01:50:08,950 --> 01:50:06,800

uh uap science okay so what does that

2664

01:50:12,390 --> 01:50:08,960

suggest to you does that suggest

2665

01:50:15,830 --> 01:50:12,400

that uh we kind of got two ways to go

2666

01:50:17,990 --> 01:50:15,840

then one uh this was e.t

2667

01:50:19,990 --> 01:50:18,000

visiting planet earth with technology

2668

01:50:23,350 --> 01:50:20,000

that we purely don't understand

2669

01:50:26,470 --> 01:50:23,360

or b it was

2670

01:50:30,950 --> 01:50:26,480

not what they think they

2671

01:50:33,350 --> 01:50:30,960

saw and their eyewitness accounts

2672

01:50:34,629 --> 01:50:33,360

are not accurate i'm not suggesting that

2673

01:50:36,790 --> 01:50:34,639

they're lying what i'm saying is what

2674

01:50:40,070 --> 01:50:36,800

they have described

2675

01:50:41,750 --> 01:50:40,080

is not what was reality like the

2676
01:50:43,350 --> 01:50:41,760
trickster phenomenon right is that what

2677
01:50:46,629 --> 01:50:43,360
you're saying well it could be that

2678
01:50:48,709 --> 01:50:46,639
too as well i mean look you have 10

2679
01:50:50,390 --> 01:50:48,719
witnesses to a car accident you got 10

2680
01:50:51,750 --> 01:50:50,400
different versions of what actually

2681
01:50:53,910 --> 01:50:51,760
happened

2682
01:50:55,589 --> 01:50:53,920
well well we're seeing that for what

2683
01:50:57,109 --> 01:50:55,599
it's worth right going back to the

2684
01:50:59,109 --> 01:50:57,119
connection between quantum physics and

2685
01:51:02,550 --> 01:50:59,119
uaps here's another one that's

2686
01:51:04,470 --> 01:51:02,560
abstract um um there's uh the wigner's

2687
01:51:06,629 --> 01:51:04,480
friend paradox experiment

2688
01:51:07,510 --> 01:51:06,639

um it's a it's a quantum physics

2689

01:51:10,790 --> 01:51:07,520

experiment

2690

01:51:14,070 --> 01:51:10,800

that basically looks at uh

2691

01:51:17,189 --> 01:51:14,080

whether or not um you know it

2692

01:51:18,790 --> 01:51:17,199

basically it it's exploiting a paradox

2693

01:51:20,950 --> 01:51:18,800

that wigner came up with

2694

01:51:22,870 --> 01:51:20,960

based on the wave function he basically

2695

01:51:25,270 --> 01:51:22,880

pointed out that

2696

01:51:27,430 --> 01:51:25,280

each observer has their each independent

2697

01:51:30,790 --> 01:51:27,440

observer has their own wave function

2698

01:51:31,589 --> 01:51:30,800

therefore there should be a point at

2699

01:51:34,070 --> 01:51:31,599

time where

2700

01:51:34,709 --> 01:51:34,080

the observers will have conflicting

2701

01:51:38,229 --> 01:51:34,719

facts

2702

01:51:40,629 --> 01:51:38,239

experiment

2703

01:51:42,310 --> 01:51:40,639

because their wave function dictates the

2704

01:51:44,709 --> 01:51:42,320

things that they'll measure right at x

2705

01:51:47,430 --> 01:51:44,719

probability for for each measurement

2706

01:51:48,229 --> 01:51:47,440

so um he said that if you set up an

2707

01:51:50,149 --> 01:51:48,239

experiment

2708

01:51:52,470 --> 01:51:50,159

uh you will actually observe this

2709

01:51:55,589 --> 01:51:52,480

paradox if you set it up the right way

2710

01:51:58,629 --> 01:51:55,599

and and man lo and behold you know

2711

01:52:02,229 --> 01:51:58,639

a year ago the paper was published where

2712

01:52:04,790 --> 01:52:02,239

indeed that is the case we do see

2713

01:52:06,709 --> 01:52:04,800

that there is you can have quantum

2714

01:52:09,270 --> 01:52:06,719

physics experiments set up

2715

01:52:09,830 --> 01:52:09,280

where you can have independent observers

2716

01:52:11,669 --> 01:52:09,840

and they

2717

01:52:13,510 --> 01:52:11,679

all do the same exact objective

2718

01:52:14,629 --> 01:52:13,520

experiment they participate in the exact

2719

01:52:16,709 --> 01:52:14,639

same thing

2720

01:52:18,070 --> 01:52:16,719

and they all come out with objectively

2721

01:52:20,390 --> 01:52:18,080

different answers

2722

01:52:21,189 --> 01:52:20,400

that conflict right they have little

2723

01:52:23,750 --> 01:52:21,199

conflicting

2724

01:52:25,189 --> 01:52:23,760

facts that should never happen like the

2725

01:52:27,510 --> 01:52:25,199

scientific method

2726
01:52:28,310 --> 01:52:27,520
uh hinges on the fact that that doesn't

2727
01:52:30,870 --> 01:52:28,320
happen

2728
01:52:31,830 --> 01:52:30,880
so yeah so so it's really cool uaps are

2729
01:52:36,070 --> 01:52:31,840
like the

2730
01:52:39,189 --> 01:52:36,080
version of that phenomenon in some sense

2731
01:52:41,669 --> 01:52:39,199
so as you have looked at the data

2732
01:52:44,310 --> 01:52:41,679
uh what conclusion i'm not talking about

2733
01:52:46,149 --> 01:52:44,320
the videos i'm just talking about

2734
01:52:47,990 --> 01:52:46,159
because the videos don't represent what

2735
01:52:50,950 --> 01:52:48,000
was actually seen

2736
01:52:52,390 --> 01:52:50,960
but yeah but when you listen to the

2737
01:52:55,510 --> 01:52:52,400
testimony

2738
01:52:57,189 --> 01:52:55,520

um and the eyewitness accounts what

2739

01:52:58,910 --> 01:52:57,199

conclusions have you come to do you

2740

01:53:00,629 --> 01:52:58,920

think that the tic tac was

2741

01:53:02,790 --> 01:53:00,639

extraterrestrial or do you think it's

2742

01:53:05,990 --> 01:53:02,800

something else

2743

01:53:07,030 --> 01:53:06,000

yeah um it's a great question i i've

2744

01:53:09,830 --> 01:53:07,040

concluded that

2745

01:53:10,470 --> 01:53:09,840

i think we live in a very diverse fauna

2746

01:53:13,510 --> 01:53:10,480

of life

2747

01:53:16,229 --> 01:53:13,520

uh i i don't think

2748

01:53:16,629 --> 01:53:16,239

i i think for what it's worth it does

2749

01:53:18,629 --> 01:53:16,639

not

2750

01:53:19,830 --> 01:53:18,639

matter whether there's one intelligence

2751
01:53:21,750 --> 01:53:19,840
or multiple

2752
01:53:23,350 --> 01:53:21,760
because we ourselves don't have the

2753
01:53:26,310 --> 01:53:23,360
science to discern

2754
01:53:28,229 --> 01:53:26,320
one way or another we have to assume uh

2755
01:53:29,669 --> 01:53:28,239
we have to take it by case-by-case basis

2756
01:53:32,070 --> 01:53:29,679
that's my own personal

2757
01:53:33,830 --> 01:53:32,080
opinion on it um knowing though full

2758
01:53:35,270 --> 01:53:33,840
well why eyes wide open that could be

2759
01:53:37,109 --> 01:53:35,280
one intelligence

2760
01:53:39,589 --> 01:53:37,119
um that being said when you look at all

2761
01:53:40,870 --> 01:53:39,599
the witness reports and the testimonies

2762
01:53:43,990 --> 01:53:40,880
and whatnot

2763
01:53:44,709 --> 01:53:44,000

um you realize that there's sort of a

2764

01:53:48,470 --> 01:53:44,719

level of

2765

01:53:50,310 --> 01:53:48,480

abstraction uh that that is happening

2766

01:53:53,990 --> 01:53:50,320

like a level of

2767

01:53:55,430 --> 01:53:54,000

um you know how like you know how have

2768

01:53:57,510 --> 01:53:55,440

you ever had such an abstract

2769

01:53:59,270 --> 01:53:57,520

thought that you couldn't you wish you

2770

01:54:00,790 --> 01:53:59,280

could just like convey to somebody else

2771

01:54:03,350 --> 01:54:00,800

but you know you never will

2772

01:54:05,030 --> 01:54:03,360

i i do i did it today at subway when i

2773

01:54:09,030 --> 01:54:05,040

ordered sandwiches

2774

01:54:12,550 --> 01:54:09,040

that's awesome there you go yeah

2775

01:54:15,669 --> 01:54:12,560

so so imagine those thoughts uh

2776
01:54:17,750 --> 01:54:15,679
now imagine um uh species

2777
01:54:19,430 --> 01:54:17,760
who are capable of comprehending those

2778
01:54:21,430 --> 01:54:19,440
thoughts and reading it

2779
01:54:22,629 --> 01:54:21,440
completely fine right it's like a

2780
01:54:25,189 --> 01:54:22,639
language to them

2781
01:54:27,109 --> 01:54:25,199
the art of the unknown the the all these

2782
01:54:29,830 --> 01:54:27,119
things that are just out of reach

2783
01:54:30,470 --> 01:54:29,840
and abstract and immaterial to us it

2784
01:54:32,950 --> 01:54:30,480
feels like

2785
01:54:33,830 --> 01:54:32,960
we're dealing with intelligences that

2786
01:54:37,109 --> 01:54:33,840
easily

2787
01:54:38,229 --> 01:54:37,119
have software or math or science or the

2788
01:54:40,629 --> 01:54:38,239

intelligence

2789

01:54:41,830 --> 01:54:40,639

to easily manage that kind of abstract

2790

01:54:43,990 --> 01:54:41,840

information

2791

01:54:45,589 --> 01:54:44,000

uh and then therefore uh express

2792

01:54:47,750 --> 01:54:45,599

themselves accordingly

2793

01:54:48,790 --> 01:54:47,760

like in our culture or or to us

2794

01:54:51,589 --> 01:54:48,800

individually

2795

01:54:53,189 --> 01:54:51,599

based on that so um i think when it

2796

01:54:56,870 --> 01:54:53,199

comes to the tic tac though

2797

01:54:59,350 --> 01:54:56,880

uh however there is a class of

2798

01:54:59,990 --> 01:54:59,360

physical seemingly uaps that are

2799

01:55:02,709 --> 01:55:00,000

reported

2800

01:55:03,109 --> 01:55:02,719

over and over again that make me believe

2801

01:55:05,430 --> 01:55:03,119

that

2802

01:55:07,350 --> 01:55:05,440

they could very well just be what they

2803

01:55:09,030 --> 01:55:07,360

are right a spade a spade called spade a

2804

01:55:10,950 --> 01:55:09,040

spade that kind of deal

2805

01:55:12,390 --> 01:55:10,960

um but i think though that the ones

2806

01:55:14,229 --> 01:55:12,400

where there are very

2807

01:55:16,390 --> 01:55:14,239

you know some of these interactions

2808

01:55:19,189 --> 01:55:16,400

where there's humans reporting

2809

01:55:20,149 --> 01:55:19,199

a being involved in stuff i really

2810

01:55:23,109 --> 01:55:20,159

wonder

2811

01:55:24,070 --> 01:55:23,119

uh about that i don't know if that's

2812

01:55:27,430 --> 01:55:24,080

alien

2813

01:55:28,229 --> 01:55:27,440

um and i don't even know if we have any

2814

01:55:29,830 --> 01:55:28,239

word that's

2815

01:55:32,310 --> 01:55:29,840

accurate enough to describe it i don't

2816

01:55:32,629 --> 01:55:32,320

think interdimensional for example is

2817

01:55:35,910 --> 01:55:32,639

the

2818

01:55:37,030 --> 01:55:35,920

it's a good enough word uh it's um

2819

01:55:39,750 --> 01:55:37,040

we just need to come up with new

2820

01:55:40,790 --> 01:55:39,760

vocabulary is a problem man i i think

2821

01:55:44,149 --> 01:55:40,800

that we're dealing with

2822

01:55:46,629 --> 01:55:44,159

things that are just not easily

2823

01:55:48,109 --> 01:55:46,639

clear-cut black and white alien not

2824

01:55:50,070 --> 01:55:48,119

alien ultra-traditional

2825

01:55:53,430 --> 01:55:50,080

non-ultra-terrestrial

2826

01:55:57,030 --> 01:55:53,440

but what do you think

2827

01:55:59,990 --> 01:55:57,040

i understand the clarification

2828

01:56:00,550 --> 01:56:00,000

but what do you think you're so funny

2829

01:56:03,350 --> 01:56:00,560

jimmy

2830

01:56:05,669 --> 01:56:03,360

okay don't be a politician i'm asking

2831

01:56:09,030 --> 01:56:05,679

you a direct question

2832

01:56:12,830 --> 01:56:09,040

e.t not of this earth or

2833

01:56:16,390 --> 01:56:12,840

terrestrial no gray area i think it's

2834

01:56:18,149 --> 01:56:16,400

obviously uh extraterrestrial

2835

01:56:19,990 --> 01:56:18,159

or at least at the very least not of

2836

01:56:23,830 --> 01:56:20,000

human origin not of trash

2837

01:56:28,070 --> 01:56:23,840

see that wasn't that wasn't so hard deep

2838

01:56:31,109 --> 01:56:28,080

it was so funny that wasn't so hard

2839

01:56:34,470 --> 01:56:31,119

i i i i don't know

2840

01:56:37,750 --> 01:56:34,480

you know i i don't know i

2841

01:56:39,030 --> 01:56:37,760

i i have seen too many things that i

2842

01:56:41,510 --> 01:56:39,040

can't explain

2843

01:56:43,669 --> 01:56:41,520

i'm not an eyewitness to this i can only

2844

01:56:47,510 --> 01:56:43,679

listen to everybody else

2845

01:56:49,750 --> 01:56:47,520

um i just don't know what i find in

2846

01:56:50,709 --> 01:56:49,760

the the the one thing when we look at

2847

01:56:53,189 --> 01:56:50,719

variables

2848

01:56:54,070 --> 01:56:53,199

right we're trying to measure one of the

2849

01:56:57,589 --> 01:56:54,080

things we can

2850

01:57:01,830 --> 01:56:57,599

measure with this is that both

2851
01:57:05,030 --> 01:57:01,840
of these cases involve the us navy

2852
01:57:07,109 --> 01:57:05,040
battle groups on each coast

2853
01:57:08,629 --> 01:57:07,119
now that is something when we plug in

2854
01:57:12,390 --> 01:57:08,639
the data

2855
01:57:15,270 --> 01:57:12,400
we have to seriously consider why

2856
01:57:15,669 --> 01:57:15,280
why because the tic tac wasn't seen over

2857
01:57:18,709 --> 01:57:15,679
los

2858
01:57:19,270 --> 01:57:18,719
angeles for the general public right it

2859
01:57:21,750 --> 01:57:19,280
wasn't

2860
01:57:23,430 --> 01:57:21,760
seen over san francisco seattle kansas

2861
01:57:25,270 --> 01:57:23,440
city chicago

2862
01:57:27,350 --> 01:57:25,280
we're talking about two carrier battle

2863
01:57:28,629 --> 01:57:27,360

groups uh one on the east coast one on

2864

01:57:32,550 --> 01:57:28,639

the west coast

2865

01:57:34,950 --> 01:57:32,560

that that that is a variable that we

2866

01:57:38,470 --> 01:57:34,960

have to seriously consider

2867

01:57:39,030 --> 01:57:38,480

and ask why now is it just messing with

2868

01:57:44,629 --> 01:57:39,040

our

2869

01:57:46,310 --> 01:57:44,639

that's that's another definition of

2870

01:57:49,350 --> 01:57:46,320

irony isn't it

2871

01:57:52,629 --> 01:57:49,360

right so that you have that

2872

01:57:53,589 --> 01:57:52,639

fightership bias right right yes total

2873

01:57:57,109 --> 01:57:53,599

bias

2874

01:57:59,830 --> 01:57:57,119

with that or

2875

01:58:01,270 --> 01:57:59,840

is it beyond coincidence and we have to

2876

01:58:04,070 --> 01:58:01,280

just maybe deduce

2877

01:58:05,669 --> 01:58:04,080

to something much more simple and that

2878

01:58:08,070 --> 01:58:05,679

maybe it is terrestrial

2879

01:58:08,790 --> 01:58:08,080

maybe it is the soviet union or the

2880

01:58:11,270 --> 01:58:08,800

chinese

2881

01:58:12,149 --> 01:58:11,280

or india messing with our navy and

2882

01:58:15,510 --> 01:58:12,159

testing

2883

01:58:17,830 --> 01:58:15,520

systems or it's our air force and its

2884

01:58:20,870 --> 01:58:17,840

lockheed testing systems

2885

01:58:23,189 --> 01:58:20,880

uh is is that more

2886

01:58:24,310 --> 01:58:23,199

simple i don't know i don't know and

2887

01:58:27,030 --> 01:58:24,320

only time's gonna

2888

01:58:27,510 --> 01:58:27,040

only time will tell only time will tell

2889

01:58:31,270 --> 01:58:27,520

i i

2890

01:58:31,830 --> 01:58:31,280

fully agree with that um it's we're very

2891

01:58:33,589 --> 01:58:31,840

much

2892

01:58:36,310 --> 01:58:33,599

in the twilight zone when it comes to

2893

01:58:38,629 --> 01:58:36,320

the confirmation of et life

2894

01:58:40,790 --> 01:58:38,639

everything is in the in the gray zone

2895

01:58:43,350 --> 01:58:40,800

right of plausible deniability

2896

01:58:44,790 --> 01:58:43,360

uh like we're one we're literally like

2897

01:58:47,990 --> 01:58:44,800

one alien body you know

2898

01:58:48,709 --> 01:58:48,000

away from um you know cracking this case

2899

01:58:51,109 --> 01:58:48,719

wide open

2900

01:58:52,629 --> 01:58:51,119

that's right but i i've also realized

2901

01:58:54,550 --> 01:58:52,639

you know i think we all have

2902

01:58:57,189 --> 01:58:54,560

that it's not gonna be that easy like

2903

01:58:58,870 --> 01:58:57,199

like disclosure is not gonna be

2904

01:59:01,030 --> 01:58:58,880

you know clean cut like that should it

2905

01:59:04,709 --> 01:59:01,040

happen like as a process

2906

01:59:06,950 --> 01:59:04,719

uh there's yeah this is clearly weirder

2907

01:59:08,390 --> 01:59:06,960

than all of that yeah it is it is let's

2908

01:59:09,510 --> 01:59:08,400

take a break right here we need to get

2909

01:59:11,510 --> 01:59:09,520

this in

2910

01:59:13,189 --> 01:59:11,520

our guest tonight deep prasad we are

2911

01:59:15,750 --> 01:59:13,199

discussing

2912

01:59:17,589 --> 01:59:15,760

applying modern science and physics to

2913

01:59:19,830 --> 01:59:17,599

the known and unknown data when it comes

2914

01:59:21,830 --> 01:59:19,840

to ufos and extraterrestrial

2915

01:59:23,589 --> 01:59:21,840

intelligence this is fade to black

2916

01:59:29,189 --> 01:59:23,599

i'm yours jimmy church we'll be right

2917

01:59:36,790 --> 01:59:30,950

hi everybody us is rob halpert the metal

2918

01:59:40,390 --> 01:59:39,350

this is kgra digital broadcasting

2919

01:59:44,070 --> 01:59:40,400

station

2920

01:59:45,830 --> 01:59:44,080

salt lake city utah van buren arkansas

2921

01:59:47,990 --> 01:59:45,840

why is it we're not very good with our

2922

01:59:49,350 --> 01:59:48,000

health regiment until it's too late we

2923

01:59:50,870 --> 01:59:49,360

don't put oil in the car

2924

01:59:53,109 --> 01:59:50,880

until the engine blows up when the

2925

01:59:55,589 --> 01:59:53,119

body's out of balance your health

2926
01:59:57,990 --> 01:59:55,599
is not so good give your body some love

2927
02:00:00,870 --> 01:59:58,000
log on to get the tea.com that's get

2928
02:00:02,550 --> 02:00:00,880
the tea dot com try our life change tea

2929
02:00:03,510 --> 02:00:02,560
which cleanses you from harmful

2930
02:00:05,669 --> 02:00:03,520
intruders

2931
02:00:07,189 --> 02:00:05,679
a clean colon is one of the ways to

2932
02:00:09,189 --> 02:00:07,199
bring the body in balance

2933
02:00:10,310 --> 02:00:09,199
we also carry organic supplements to

2934
02:00:13,030 --> 02:00:10,320
help you get where

2935
02:00:16,589 --> 02:00:13,040
you need to go so do your body a favor

2936
02:00:17,830 --> 02:00:16,599
log on to get the tea.com that's get the

2937
02:00:20,070 --> 02:00:17,840
ttea.com

2938
02:00:21,350 --> 02:00:20,080

you can even visit our sales page to

2939

02:00:23,589 --> 02:00:21,360

save some dough

2940

02:00:25,270 --> 02:00:23,599

does anybody call money dough anymore

2941

02:00:26,070 --> 02:00:25,280

anyway if you're looking for short

2942

02:00:28,950 --> 02:00:26,080

helpful health

2943

02:00:30,310 --> 02:00:28,960

tips go to youtube and punch in health

2944

02:00:37,430 --> 02:00:30,320

matters now

2945

02:00:38,070 --> 02:00:37,440

log on to get the tea.com shop get

2946

02:00:40,390 --> 02:00:38,080

balanced

2947

02:00:41,109 --> 02:00:40,400

then learn some cool tips at health

2948

02:00:43,109 --> 02:00:41,119

matters

2949

02:00:45,589 --> 02:00:43,119

now you'll be glad you did that's get

2950

02:00:47,589 --> 02:00:45,599

the tea dot com

2951
02:00:48,640 --> 02:00:47,599
your contact for current news and

2952
02:00:50,510 --> 02:00:48,650
trending topics

2953
02:00:52,390 --> 02:00:50,520
[Music]

2954
02:00:54,229 --> 02:00:52,400
kgraradio.com

2955
02:00:55,990 --> 02:00:54,239
this is jimmy church of fade to black

2956
02:00:59,189 --> 02:00:56,000
and i only drink

2957
02:00:59,910 --> 02:00:59,199
fade to black blend coffee from river

2958
02:01:04,149 --> 02:00:59,920
moon

2959
02:01:07,430 --> 02:01:04,159
banner at jimmychurchradio.com

2960
02:01:09,990 --> 02:01:07,440
promo code f2b blend

2961
02:01:12,870 --> 02:01:10,000
let's face it you've always wanted to do

2962
02:01:16,070 --> 02:01:12,880
a sky watch and see your first ufo

2963
02:01:19,350 --> 02:01:16,080

today it's easy just get your own hp

2964

02:01:20,229 --> 02:01:19,360

7 3b cobalt jimmy church edition night

2965

02:01:22,790 --> 02:01:20,239

vision goggles

2966

02:01:25,189 --> 02:01:22,800

from hoffman's optics this is the same

2967

02:01:27,910 --> 02:01:25,199

us military system that i use featuring

2968

02:01:28,550 --> 02:01:27,920

a generation three blue phosphor image

2969

02:01:31,350 --> 02:01:28,560

tube

2970

02:01:32,149 --> 02:01:31,360

that's right it's blue not black and

2971

02:01:34,229 --> 02:01:32,159

green

2972

02:01:35,830 --> 02:01:34,239

this is the only blue system in the

2973

02:01:38,470 --> 02:01:35,840

world and it's waterproof

2974

02:01:39,910 --> 02:01:38,480

lightweight combat proven simple to use

2975

02:01:42,310 --> 02:01:39,920

and ready to go

2976
02:01:43,750 --> 02:01:42,320
hoffman's optics help create night

2977
02:01:45,669 --> 02:01:43,760
vision sky watches

2978
02:01:47,589 --> 02:01:45,679
and now you can see what everyone has

2979
02:01:48,709 --> 02:01:47,599
been talking about each night from your

2980
02:01:52,149 --> 02:01:48,719
own backyard

2981
02:01:56,070 --> 02:01:52,159
just call 760-231-9929

2982
02:01:58,070 --> 02:01:56,080
that's 760-231-9929

2983
02:02:01,350 --> 02:01:58,080
you can click on the banners on our site

2984
02:02:05,510 --> 02:02:01,360
or visit ufonightvisiongoggles.com

2985
02:02:09,430 --> 02:02:05,520
that's ufo night vision goggles dot com

2986
02:02:13,430 --> 02:02:09,440
go back lee tappy this is the only way

2987
02:02:19,589 --> 02:02:13,440
forward this is aid to black

2988
02:02:22,790 --> 02:02:19,599

make contact kgraradio.com

2989

02:02:25,189 --> 02:02:22,800

listen i know and you know that you've

2990

02:02:27,430 --> 02:02:25,199

always wanted your first crystal skull

2991

02:02:29,589 --> 02:02:27,440

or maybe you're a collector just like me

2992

02:02:31,350 --> 02:02:29,599

but you just don't know where to go to

2993

02:02:34,669 --> 02:02:31,360

find the real thing

2994

02:02:36,070 --> 02:02:34,679

then i met carolyn ford over at

2995

02:02:38,470 --> 02:02:36,080

einsteinthecrystalskull.com

2996

02:02:40,470 --> 02:02:38,480

carolyn is the guardian of einstein one

2997

02:02:41,990 --> 02:02:40,480

of the most respected ancient crystal

2998

02:02:43,669 --> 02:02:42,000

skulls in the world

2999

02:02:45,910 --> 02:02:43,679

all of her unique skulls have been

3000

02:02:47,910 --> 02:02:45,920

imprinted sitting with einstein in his

3001

02:02:50,149 --> 02:02:47,920

sacred lodge and are carved from the

3002

02:02:52,310 --> 02:02:50,159

finest gemstone and materials

3003

02:02:54,870 --> 02:02:52,320

imprinting is the process of receiving

3004

02:02:55,189 --> 02:02:54,880

the ancient wisdom from the master skull

3005

02:02:58,229 --> 02:02:55,199

or

3006

02:02:59,430 --> 02:02:58,239

master computer einstein the ancient

3007

02:03:01,189 --> 02:02:59,440

crystal skull

3008

02:03:04,910 --> 02:03:01,199

to see carolyn's current collection of

3009

02:03:06,550 --> 02:03:04,920

crystal skulls just visit her store at

3010

02:03:08,550 --> 02:03:06,560

einsteinthecrystalskull.com or click on

3011

02:03:11,030 --> 02:03:08,560

the banner over on our site

3012

02:03:12,950 --> 02:03:11,040

don't forget to use the promo code jimmy

3013

02:03:15,510 --> 02:03:12,960

at checkout to receive 10

3014

02:03:16,229 --> 02:03:15,520

off of your order today that's promo

3015

02:03:18,790 --> 02:03:16,239

code

3016

02:03:20,149 --> 02:03:18,800

jimmy finding your first or next crystal

3017

02:03:22,430 --> 02:03:20,159

skull is easy

3018

02:03:24,550 --> 02:03:22,440

just visit einstein the crystal

3019

02:03:27,109 --> 02:03:24,560

skull.com

3020

02:03:29,270 --> 02:03:27,119

telepath is a weekly digital newsletter

3021

02:03:31,669 --> 02:03:29,280

filled with the latest paranormal news

3022

02:03:33,510 --> 02:03:31,679

trending topics and fresh articles from

3023

02:03:35,510 --> 02:03:33,520

some of the most popular critical

3024

02:03:37,030 --> 02:03:35,520

thinkers in the community today

3025

02:03:39,589 --> 02:03:37,040

stay informed on your favorite

3026
02:03:40,470 --> 02:03:39,599
paranormal podcasts and live streaming

3027
02:03:42,390 --> 02:03:40,480
talk shows

3028
02:03:43,830 --> 02:03:42,400
interact with the telepath and upload

3029
02:03:45,830 --> 02:03:43,840
your paranormal story or

3030
02:03:47,030 --> 02:03:45,840
picks it could be featured in an

3031
02:03:49,510 --> 02:03:47,040
upcoming edition

3032
02:03:52,069 --> 02:03:49,520
sign up right now for the free telepath

3033
02:04:03,669 --> 02:03:52,079
newsletter at paranormal dot radio

3034
02:04:10,629 --> 02:04:06,790
you wanna know a secret i love

3035
02:04:12,870 --> 02:04:10,639
ponies i really love ponies i'm serious

3036
02:04:14,229 --> 02:04:12,880
i couldn't stay sane without pawn mr

3037
02:04:17,430 --> 02:04:14,239
brush

3038
02:04:18,390 --> 02:04:17,440

why fade to black because you never got

3039

02:04:22,790 --> 02:04:18,400

that pony

3040

02:04:27,270 --> 02:04:24,950

this is fade to black with jimmy church

3041

02:04:44,229 --> 02:04:27,280

on the game changer radio network

3042

02:04:47,350 --> 02:04:45,750

all right welcome back fade to black i'm

3043

02:04:50,629 --> 02:04:47,360

your host jimmy church on the game

3044

02:04:52,950 --> 02:04:50,639

changer network and kg ra the planets

3045

02:04:53,750 --> 02:04:52,960

tonight deep versailles is here tomorrow

3046

02:04:55,189 --> 02:04:53,760

night jay

3047

02:04:57,510 --> 02:04:55,199

widener we're going to be talking about

3048

02:04:59,750 --> 02:04:57,520

the life and times of terence mckenna

3049

02:05:02,149 --> 02:04:59,760

wednesday night carolyn ford and crystal

3050

02:05:05,189 --> 02:05:02,159

skulls but tonight it's deep prasad

3051
02:05:05,990 --> 02:05:05,199
and deep science now okay deep in this

3052
02:05:07,669 --> 02:05:06,000
last segment

3053
02:05:09,589 --> 02:05:07,679
i want to talk about some fundamental

3054
02:05:13,270 --> 02:05:09,599
things and that is

3055
02:05:16,310 --> 02:05:13,280
the first thing is this is it

3056
02:05:18,830 --> 02:05:16,320
easy to find other

3057
02:05:20,550 --> 02:05:18,840
physicists and quantum physicists out

3058
02:05:23,990 --> 02:05:20,560
there uh

3059
02:05:26,950 --> 02:05:24,000
that are on this side of the ufo

3060
02:05:29,109 --> 02:05:26,960
question that we are being visited

3061
02:05:30,629 --> 02:05:29,119
instead of applying the laws of physics

3062
02:05:32,149 --> 02:05:30,639
saying ah

3063
02:05:34,790 --> 02:05:32,159

they are just too far away it's

3064

02:05:37,669 --> 02:05:34,800

impossible is it easier today to get

3065

02:05:40,790 --> 02:05:37,679

those conversations started

3066

02:05:44,310 --> 02:05:40,800

um with other physicists so

3067

02:05:46,950 --> 02:05:44,320

like it it depends on

3068

02:05:47,510 --> 02:05:46,960

uh whether you count as you starting the

3069

02:05:51,350 --> 02:05:47,520

con

3070

02:05:54,550 --> 02:05:51,360

i mean

3071

02:05:57,669 --> 02:05:54,560

uh i've had uh um i had

3072

02:05:59,990 --> 02:05:57,679

one i i won't name him uh but uh

3073

02:06:00,870 --> 02:06:00,000

just yet um you know but he's a really

3074

02:06:04,069 --> 02:06:00,880

great guy

3075

02:06:05,270 --> 02:06:04,079

uh very famous physics influencer he's a

3076

02:06:06,550 --> 02:06:05,280

very young

3077

02:06:08,470 --> 02:06:06,560

person you know one of the youngest

3078

02:06:10,390 --> 02:06:08,480

physics influencers out there

3079

02:06:11,589 --> 02:06:10,400

uh reached out to me and and you know

3080

02:06:13,669 --> 02:06:11,599

we've been friends

3081

02:06:15,830 --> 02:06:13,679

since and we've been talking about uaps

3082

02:06:17,589 --> 02:06:15,840

and stuff like that who's that brian cox

3083

02:06:20,229 --> 02:06:17,599

is it brian cox

3084

02:06:20,950 --> 02:06:20,239

no i'll tell you privately okay all

3085

02:06:24,390 --> 02:06:20,960

right all right

3086

02:06:26,790 --> 02:06:24,400

yeah cool so um but so uh yeah

3087

02:06:27,830 --> 02:06:26,800

so so i've had those super interesting

3088

02:06:30,870 --> 02:06:27,840

scenarios

3089

02:06:34,310 --> 02:06:30,880

but more often than not it's

3090

02:06:37,270 --> 02:06:34,320

only been when i've brought it up has uh

3091

02:06:38,310 --> 02:06:37,280

the conversation led to you know the

3092

02:06:41,669 --> 02:06:38,320

possibility

3093

02:06:42,830 --> 02:06:41,679

of uh uaps representing et's like that

3094

02:06:45,990 --> 02:06:42,840

kind of like

3095

02:06:46,470 --> 02:06:46,000

conversation does happen more often than

3096

02:06:49,830 --> 02:06:46,480

you may

3097

02:06:51,270 --> 02:06:49,840

think um in these like let's say circles

3098

02:06:54,310 --> 02:06:51,280

like when i when i

3099

02:06:56,790 --> 02:06:54,320

um bring it up with a i am

3100

02:06:58,229 --> 02:06:56,800

always surprised when i bring it up with

3101

02:06:59,910 --> 02:06:58,239

any random person

3102

02:07:01,830 --> 02:06:59,920

you know in the quantum physics or

3103

02:07:04,229 --> 02:07:01,840

quantum computing community

3104

02:07:05,189 --> 02:07:04,239

uh that let's say collaborate with or

3105

02:07:07,589 --> 02:07:05,199

that i just

3106

02:07:08,310 --> 02:07:07,599

uh talk to or work with like i just

3107

02:07:11,510 --> 02:07:08,320

don't get

3108

02:07:15,109 --> 02:07:11,520

you know uh judgment um or

3109

02:07:18,310 --> 02:07:15,119

or or or fear and and many times when

3110

02:07:20,310 --> 02:07:18,320

people actually learn about the data and

3111

02:07:22,629 --> 02:07:20,320

what the tic tac assuming that it's you

3112

02:07:25,669 --> 02:07:22,639

know not a big hoax or something right

3113

02:07:29,030 --> 02:07:25,679

when when a lot of physicists they hear

3114

02:07:31,270 --> 02:07:29,040

about it being real they're like holy

3115

02:07:34,229 --> 02:07:31,280

[h__\h] that sounds like aliens

3116

02:07:36,229 --> 02:07:34,239

and so so what if you know you get a

3117

02:07:36,950 --> 02:07:36,239

physicist to the point where they can at

3118

02:07:40,470 --> 02:07:36,960

least

3119

02:07:43,510 --> 02:07:40,480

uh admit

3120

02:07:44,870 --> 02:07:43,520

that the that these uaps can even exist

3121

02:07:48,229 --> 02:07:44,880

in the first place

3122

02:07:50,069 --> 02:07:48,239

um at that point nobody very few people

3123

02:07:52,470 --> 02:07:50,079

i've seen in my experience very few

3124

02:07:54,870 --> 02:07:52,480

physicists have tried to claim that oh

3125

02:07:58,870 --> 02:07:54,880

that's government technology

3126
02:07:59,910 --> 02:07:58,880
or that's xyz um explanations like if

3127
02:08:02,229 --> 02:07:59,920
they think

3128
02:08:03,030 --> 02:08:02,239
that if they believe and trust the

3129
02:08:06,390 --> 02:08:03,040
military

3130
02:08:09,350 --> 02:08:06,400
uh and whatnot they will often conclude

3131
02:08:10,149 --> 02:08:09,360
that crap that's just not human science

3132
02:08:11,669 --> 02:08:10,159
like that's

3133
02:08:13,830 --> 02:08:11,679
that just sounds like aliens and that

3134
02:08:16,310 --> 02:08:13,840
just needs to be investigated further

3135
02:08:17,669 --> 02:08:16,320
uh that that kind of thing well most

3136
02:08:21,030 --> 02:08:17,679
physicists

3137
02:08:24,310 --> 02:08:21,040
and when i say most 100 percent

3138
02:08:28,390 --> 02:08:24,320

right they

3139

02:08:30,709 --> 02:08:28,400

stay within their

3140

02:08:31,990 --> 02:08:30,719

they stay within the lines and one of

3141

02:08:34,870 --> 02:08:32,000

those lines

3142

02:08:36,629 --> 02:08:34,880

that nobody is willing to cross is the

3143

02:08:40,550 --> 02:08:36,639

speed of light

3144

02:08:43,830 --> 02:08:40,560

all right that's it that right there

3145

02:08:47,669 --> 02:08:43,840

that if we are talking about

3146

02:08:51,510 --> 02:08:47,679

faster than light travel physically

3147

02:08:54,629 --> 02:08:51,520

the answer is no it's an impossibility

3148

02:08:56,950 --> 02:08:54,639

that that part of it is the line that

3149

02:09:00,149 --> 02:08:56,960

nobody is willing to cross

3150

02:09:02,069 --> 02:09:00,159

yet but well

3151

02:09:04,149 --> 02:09:02,079

when when i say that i think you're in

3152

02:09:06,950 --> 02:09:04,159

agreement right i

3153

02:09:07,589 --> 02:09:06,960

i am in complete agreement with you so

3154

02:09:11,350 --> 02:09:07,599

that's why i

3155

02:09:14,149 --> 02:09:11,360

bring up the data

3156

02:09:16,709 --> 02:09:14,159

about uaps will physicists start

3157

02:09:19,589 --> 02:09:16,719

thinking about uaps potentially being

3158

02:09:21,510 --> 02:09:19,599

alien if you just ask yo like you know

3159

02:09:23,910 --> 02:09:21,520

it's business yo do you think

3160

02:09:25,510 --> 02:09:23,920

ufos are aliens without telling them you

3161

02:09:27,350 --> 02:09:25,520

know giving them any data

3162

02:09:28,629 --> 02:09:27,360

and they're just relying on prior

3163

02:09:29,750 --> 02:09:28,639

knowledge right they're gonna give you

3164

02:09:32,470 --> 02:09:29,760

the generic answer

3165

02:09:34,069 --> 02:09:32,480

absolutely not right the speed of light

3166

02:09:37,589 --> 02:09:34,079

is the way that it is and it is

3167

02:09:39,350 --> 02:09:37,599

way too slow uh to to allow

3168

02:09:40,870 --> 02:09:39,360

even if you're traveling at close enough

3169

02:09:43,350 --> 02:09:40,880

to speed of light right

3170

02:09:44,069 --> 02:09:43,360

most you know space is just way too

3171

02:09:45,589 --> 02:09:44,079

large

3172

02:09:47,270 --> 02:09:45,599

frankly that you would just have to be

3173

02:09:50,069 --> 02:09:47,280

going faster than light

3174

02:09:50,790 --> 02:09:50,079

uh to actually yeah be a viable species

3175

02:09:52,790 --> 02:09:50,800

and then they'll

3176
02:09:54,310 --> 02:09:52,800
tell you yeah that's just not happening

3177
02:09:57,109 --> 02:09:54,320
it's not happening because

3178
02:09:58,950 --> 02:09:57,119
andromeda everybody needs to understand

3179
02:10:01,910 --> 02:09:58,960
andromeda our closest

3180
02:10:04,390 --> 02:10:01,920
galaxy our closest neighbor is two

3181
02:10:07,270 --> 02:10:04,400
million light years away

3182
02:10:08,950 --> 02:10:07,280
yeah you need to stop and just you know

3183
02:10:10,629 --> 02:10:08,960
wrap your head around that for a second

3184
02:10:12,390 --> 02:10:10,639
that's what i'm saying exactly even at

3185
02:10:12,790 --> 02:10:12,400
the speed of light it's just not fast

3186
02:10:16,069 --> 02:10:12,800
enough

3187
02:10:18,470 --> 02:10:16,079
no two million light years

3188
02:10:20,629 --> 02:10:18,480

so we're looking at andromeda in our

3189

02:10:21,830 --> 02:10:20,639

backyard with our telescopes and a

3190

02:10:23,750 --> 02:10:21,840

clear night you can see it with the

3191

02:10:26,950 --> 02:10:23,760

naked eye right sitting right up there

3192

02:10:29,510 --> 02:10:26,960

beautiful right gorgeous there it is

3193

02:10:31,669 --> 02:10:29,520

you're looking at andromeda two million

3194

02:10:33,830 --> 02:10:31,679

years ago

3195

02:10:36,149 --> 02:10:33,840

you're not looking at andromeda right

3196

02:10:38,870 --> 02:10:36,159

now in real time

3197

02:10:40,390 --> 02:10:38,880

you're looking at the old version of

3198

02:10:43,750 --> 02:10:40,400

andromeda

3199

02:10:46,870 --> 02:10:43,760

so let's back this up for a second

3200

02:10:51,189 --> 02:10:46,880

faster than light travel is one thing

3201

02:10:53,990 --> 02:10:51,199

but is folding space

3202

02:10:55,830 --> 02:10:54,000

right or the true definition of a warp

3203

02:10:58,629 --> 02:10:55,840

drive you know folding space in front of

3204

02:11:00,870 --> 02:10:58,639

you and putting space in back of you

3205

02:11:01,910 --> 02:11:00,880

you're not actually moving right

3206

02:11:04,149 --> 02:11:01,920

physically you're not

3207

02:11:06,390 --> 02:11:04,159

moving if you're folding space and

3208

02:11:08,790 --> 02:11:06,400

removing space that is in front of you

3209

02:11:10,390 --> 02:11:08,800

you know like the movie dune right yeah

3210

02:11:13,430 --> 02:11:10,400

and and you're folding space

3211

02:11:15,830 --> 02:11:13,440

you're only crossing the line so

3212

02:11:17,350 --> 02:11:15,840

is that's not traveling faster than the

3213

02:11:20,790 --> 02:11:17,360

speed of light

3214

02:11:22,870 --> 02:11:20,800

right if you in a linear sense and

3215

02:11:25,030 --> 02:11:22,880

you're calculating the distances that

3216

02:11:28,310 --> 02:11:25,040

would be there

3217

02:11:28,950 --> 02:11:28,320

basically like i see i i i see your

3218

02:11:30,950 --> 02:11:28,960

point like

3219

02:11:32,629 --> 02:11:30,960

um you're saying does that that

3220

02:11:34,390 --> 02:11:32,639

technically doesn't

3221

02:11:36,069 --> 02:11:34,400

violate the speed of light that's right

3222

02:11:39,510 --> 02:11:36,079

it doesn't

3223

02:11:42,229 --> 02:11:39,520

right am i being a doofus here or

3224

02:11:44,629 --> 02:11:42,239

is that the way it is that that is

3225

02:11:47,430 --> 02:11:44,639

that's the basis for why people suggest

3226

02:11:50,069 --> 02:11:47,440

warp drive is possible is because

3227

02:11:52,790 --> 02:11:50,079

technically in theoretically if you can

3228

02:11:53,589 --> 02:11:52,800

you know attain the negative energy

3229

02:11:57,030 --> 02:11:53,599

density

3230

02:11:59,270 --> 02:11:57,040

uh um you would be able to

3231

02:12:00,149 --> 02:11:59,280

um in theory travel faster than light

3232

02:12:02,629 --> 02:12:00,159

while not

3233

02:12:03,990 --> 02:12:02,639

violating the speed of light in any

3234

02:12:06,470 --> 02:12:04,000

local frame of reference

3235

02:12:07,350 --> 02:12:06,480

no you're not increasing your mass

3236

02:12:09,990 --> 02:12:07,360

you're not changing

3237

02:12:10,470 --> 02:12:10,000

your age and and here's the other

3238

02:12:12,470 --> 02:12:10,480

question

3239

02:12:13,990 --> 02:12:12,480

well i i would think that you're not

3240

02:12:18,470 --> 02:12:14,000

doing these things

3241

02:12:20,470 --> 02:12:18,480

but what happens to your watch

3242

02:12:21,510 --> 02:12:20,480

right okay now let's think about this

3243

02:12:23,990 --> 02:12:21,520

for a second

3244

02:12:25,189 --> 02:12:24,000

you're wearing a watch you haven't

3245

02:12:28,229 --> 02:12:25,199

crossed the line yet

3246

02:12:28,629 --> 02:12:28,239

right you haven't gone to andromeda but

3247

02:12:30,709 --> 02:12:28,639

you're

3248

02:12:32,950 --> 02:12:30,719

you you are traveling to andromeda you

3249

02:12:35,350 --> 02:12:32,960

folded the space you've closed the gap

3250

02:12:36,629 --> 02:12:35,360

it's no longer 2 million light years in

3251

02:12:38,550 --> 02:12:36,639

fact it's only the

3252

02:12:40,390 --> 02:12:38,560

the amount of time is how long it's

3253

02:12:41,109 --> 02:12:40,400

going to take you to take one step

3254

02:12:44,470 --> 02:12:41,119

forward

3255

02:12:46,470 --> 02:12:44,480

right basically that's it but what hap

3256

02:12:50,790 --> 02:12:46,480

so you take that step forward you're now

3257

02:12:53,350 --> 02:12:50,800

in andromeda what does your watch say

3258

02:12:54,550 --> 02:12:53,360

has your watched change or is your watch

3259

02:12:57,750 --> 02:12:54,560

the same

3260

02:13:00,629 --> 02:12:57,760

as it was back on earth

3261

02:13:01,750 --> 02:13:00,639

so it's a great question jimmy and and

3262

02:13:04,149 --> 02:13:01,760

what i want to tell you

3263

02:13:06,069 --> 02:13:04,159

it may not be sexy answers it doesn't

3264

02:13:07,589 --> 02:13:06,079

matter what we think

3265

02:13:09,350 --> 02:13:07,599

uh is the answer you have to

3266

02:13:11,750 --> 02:13:09,360

experimentally verify it

3267

02:13:14,310 --> 02:13:11,760

right like like i can tell you right now

3268

02:13:17,270 --> 02:13:14,320

that if you're not for example

3269

02:13:18,629 --> 02:13:17,280

if you're somehow uh you know folding

3270

02:13:21,669 --> 02:13:18,639

space-time

3271

02:13:23,189 --> 02:13:21,679

um and you you're somehow bypassing

3272

02:13:25,990 --> 02:13:23,199

relativistic effects

3273

02:13:27,350 --> 02:13:26,000

right right right that's what's going

3274

02:13:28,390 --> 02:13:27,360

down there that seems like what you're

3275

02:13:30,870 --> 02:13:28,400

implying

3276

02:13:33,109 --> 02:13:30,880

then then it kind of like there's almost

3277

02:13:36,149 --> 02:13:33,119

a violation right in the laws of physics

3278

02:13:37,270 --> 02:13:36,159

internally uh um because what happens

3279

02:13:40,229 --> 02:13:37,280

here's my question

3280

02:13:41,350 --> 02:13:40,239

um so like let's say that let's look

3281

02:13:44,870 --> 02:13:41,360

into the warp drive

3282

02:13:47,990 --> 02:13:44,880

uh example for a second

3283

02:13:50,870 --> 02:13:48,000

um we know

3284

02:13:51,589 --> 02:13:50,880

you know what happens relativistically

3285

02:13:54,390 --> 02:13:51,599

speaking

3286

02:13:55,270 --> 02:13:54,400

when we approach uh speeds closer to the

3287

02:13:58,550 --> 02:13:55,280

speed of light

3288

02:14:02,069 --> 02:13:58,560

right like we know that okay on ship

3289

02:14:04,629 --> 02:14:02,079

time time may pass uh it will pass

3290

02:14:06,310 --> 02:14:04,639

it what feels like months for us if

3291

02:14:06,950 --> 02:14:06,320

we're traveling fast enough at the speed

3292

02:14:08,870 --> 02:14:06,960

of light

3293

02:14:10,629 --> 02:14:08,880

may end up being thousands of years

3294

02:14:12,790 --> 02:14:10,639

right on back on planet earth

3295

02:14:14,629 --> 02:14:12,800

right uh if you if you left earth at

3296

02:14:17,669 --> 02:14:14,639

like yeah at a really fast

3297

02:14:19,030 --> 02:14:17,679

speed and so the question and this is

3298

02:14:20,229 --> 02:14:19,040

why i said it doesn't matter what we

3299

02:14:21,910 --> 02:14:20,239

think the answer is

3300

02:14:23,750 --> 02:14:21,920

the question of what happens when you

3301

02:14:26,870 --> 02:14:23,760

travel faster than light

3302

02:14:29,270 --> 02:14:26,880

no matter how like logical you think

3303

02:14:30,870 --> 02:14:29,280

those answers were like the models you

3304

02:14:34,069 --> 02:14:30,880

used to come up with

3305

02:14:36,870 --> 02:14:34,079

uh there's just no way of telling

3306

02:14:37,750 --> 02:14:36,880

without empirically yeah doing so

3307

02:14:41,030 --> 02:14:37,760

there's just no

3308

02:14:43,990 --> 02:14:41,040

there's no way of doing that

3309

02:14:45,589 --> 02:14:44,000

that's why like i don't i love warp

3310

02:14:48,870 --> 02:14:45,599

drive but that's why i don't

3311

02:14:49,589 --> 02:14:48,880

uh think that i think warp drive is our

3312

02:14:51,830 --> 02:14:49,599

attempt

3313

02:14:54,069 --> 02:14:51,840

at trying to find an easy way out and

3314

02:14:56,069 --> 02:14:54,079

not having to discover new physics

3315

02:14:57,430 --> 02:14:56,079

to describe faster than light travel to

3316

02:14:59,830 --> 02:14:57,440

describe tic tacs

3317

02:15:01,510 --> 02:14:59,840

well i agree with that and but this is

3318

02:15:05,189 --> 02:15:01,520

this is where

3319

02:15:08,550 --> 02:15:05,199

um if we stay in the constraints

3320

02:15:09,830 --> 02:15:08,560

of special in general right relativity

3321

02:15:14,149 --> 02:15:09,840

if we stay

3322

02:15:17,350 --> 02:15:14,159

inside of those which einstein was

3323

02:15:19,270 --> 02:15:17,360

was pretty damn good with it right

3324

02:15:20,950 --> 02:15:19,280

it's it's it has definitely stood the

3325

02:15:23,990 --> 02:15:20,960

test of time most of it

3326

02:15:26,229 --> 02:15:24,000

uh no pun intended he did but

3327

02:15:27,750 --> 02:15:26,239

but let me see let me finish this though

3328

02:15:30,950 --> 02:15:27,760

so if

3329

02:15:32,069 --> 02:15:30,960

we are in a folding of space-time

3330

02:15:34,709 --> 02:15:32,079

environment

3331

02:15:35,990 --> 02:15:34,719

and i step over i visit andromeda i'm

3332

02:15:38,790 --> 02:15:36,000

there for a day

3333

02:15:39,589 --> 02:15:38,800

and i take a couple of pictures and then

3334

02:15:42,390 --> 02:15:39,599

i step

3335

02:15:42,870 --> 02:15:42,400

back and now i'm back in earth's orbit

3336

02:15:45,910 --> 02:15:42,880

right

3337

02:15:50,470 --> 02:15:45,920

okay i'm now back here

3338

02:15:53,830 --> 02:15:50,480

by the laws that einstein presented

3339

02:15:55,910 --> 02:15:53,840

if we traveled at at the speed of light

3340

02:15:59,109 --> 02:15:55,920

or faster and did that

3341

02:16:01,109 --> 02:15:59,119

earth would now be coming back a million

3342

02:16:05,510 --> 02:16:01,119

years in the future

3343

02:16:08,709 --> 02:16:05,520

but i am guessing that we would violate

3344

02:16:12,550 --> 02:16:08,719

all of those laws and we would come back

3345

02:16:14,709 --> 02:16:12,560

in real time just the day after we left

3346

02:16:16,069 --> 02:16:14,719

and that just it seems like the universe

3347

02:16:18,870 --> 02:16:16,079

would burn up

3348

02:16:19,589 --> 02:16:18,880

right it would just melt because we have

3349

02:16:21,910 --> 02:16:19,599

just broken

3350

02:16:23,189 --> 02:16:21,920

everything that is supposed to be true

3351

02:16:25,270 --> 02:16:23,199

right and we never

3352

02:16:26,709 --> 02:16:25,280

observe any of that we never observe

3353

02:16:30,229 --> 02:16:26,719

paradoxes

3354

02:16:31,750 --> 02:16:30,239

time time loops um or or anything like

3355

02:16:34,309 --> 02:16:31,760

the simulation breaking

3356

02:16:36,469 --> 02:16:34,319

none of that ever happens um which is

3357

02:16:39,910 --> 02:16:36,479

almost like expected like

3358

02:16:40,950 --> 02:16:39,920

no no physics models no like philosophy

3359

02:16:44,709 --> 02:16:40,960

of ours

3360

02:16:46,950 --> 02:16:44,719

takes into account uh yeah the ability

3361

02:16:48,629 --> 02:16:46,960

to have like for example time loops and

3362

02:16:51,910 --> 02:16:48,639

stuff like that to

3363

02:16:54,389 --> 02:16:51,920

uh to yeah just the idea of uh truck

3364

02:16:56,070 --> 02:16:54,399

you know that um yeah just the idea of

3365

02:16:58,230 --> 02:16:56,080

traveling faster than light

3366

02:17:00,469 --> 02:16:58,240

like how that affects time it's just

3367

02:17:03,190 --> 02:17:00,479

such a truly alien concept

3368

02:17:05,429 --> 02:17:03,200

no pun intended well that's why but and

3369

02:17:09,589 --> 02:17:05,439

that's why i keep going back to

3370

02:17:11,589 --> 02:17:09,599

this um there is

3371

02:17:13,190 --> 02:17:11,599

tens of thousands of intelligent

3372

02:17:14,709 --> 02:17:13,200

civilizations here in the milky way

3373

02:17:16,230 --> 02:17:14,719

forget about andromeda

3374

02:17:18,309 --> 02:17:16,240

put andromeda they're not even at the

3375

02:17:21,750 --> 02:17:18,319

ballpark right now let's just stay

3376

02:17:23,830 --> 02:17:21,760

inside the the milky way they have to

3377

02:17:25,509 --> 02:17:23,840

exist it's just a numbers game

3378

02:17:26,870 --> 02:17:25,519

that's it it's just a numbers game they

3379

02:17:29,270 --> 02:17:26,880

exist but

3380

02:17:29,990 --> 02:17:29,280

the milky way is bigger than most people

3381

02:17:33,110 --> 02:17:30,000

think

3382

02:17:34,230 --> 02:17:33,120

and to understand space is big the milky

3383

02:17:37,750 --> 02:17:34,240

way is freaking

3384

02:17:40,070 --> 02:17:37,760

huge yeah over 100 billion stars

3385

02:17:41,990 --> 02:17:40,080

not only well it's closer to a trillion

3386

02:17:45,429 --> 02:17:42,000

but 80 billion

3387

02:17:49,830 --> 02:17:45,439

earth-like planets okay so anyway

3388

02:17:54,870 --> 02:17:49,840

to get here yeah it has to be

3389

02:17:57,030 --> 02:17:54,880

easy it's not difficult

3390

02:17:58,309 --> 02:17:57,040

and and the same concept is and it's

3391

02:18:01,349 --> 02:17:58,319

very simple

3392

02:18:03,669 --> 02:18:01,359

to drive to new york for you to drive

3393

02:18:06,549 --> 02:18:03,679

from toronto to la

3394

02:18:08,230 --> 02:18:06,559

all you have to do is make up your mind

3395

02:18:11,110 --> 02:18:08,240

it's not difficult to do

3396

02:18:13,030 --> 02:18:11,120

it's just a decision to make do i drive

3397

02:18:14,389 --> 02:18:13,040

to l.a or not do i take four days to

3398

02:18:17,270 --> 02:18:14,399

drive to l.a or not

3399

02:18:19,190 --> 02:18:17,280

do i stay in a few motels do i drink a

3400

02:18:19,910 --> 02:18:19,200

bunch of mountain dew and make it in one

3401

02:18:23,270 --> 02:18:19,920

crack

3402

02:18:25,669 --> 02:18:23,280

it's up to me it's a decision

3403

02:18:26,950 --> 02:18:25,679

it has to be the same thing when it

3404

02:18:30,870 --> 02:18:26,960

comes to

3405

02:18:33,990 --> 02:18:30,880

interstellar travel it's simple

3406

02:18:34,790 --> 02:18:34,000

it's just a decision deep it's it do we

3407

02:18:38,309 --> 02:18:34,800

go here

3408

02:18:41,509 --> 02:18:38,319

here all right

3409

02:18:43,990 --> 02:18:41,519

let's go to vegas instead of uh uh

3410

02:18:44,950 --> 02:18:44,000

seattle all right whatever the decision

3411

02:18:48,150 --> 02:18:44,960

is right it's

3412

02:18:50,070 --> 02:18:48,160

just a decision and it has to be simple

3413

02:18:51,349 --> 02:18:50,080

it may violate everything that we know

3414

02:18:54,230 --> 02:18:51,359

today

3415

02:18:57,669 --> 02:18:54,240

but for them it's simple because your

3416

02:19:00,389 --> 02:18:57,679

drive from toronto to la in four days

3417

02:19:01,990 --> 02:19:00,399

have somebody imagine that in the year

3418

02:19:04,629 --> 02:19:02,000

1800

3419

02:19:07,110 --> 02:19:04,639

they couldn't they couldn't grasp that

3420

02:19:09,509 --> 02:19:07,120

definitely not

3421

02:19:10,790 --> 02:19:09,519

right you're you're you're absolutely

3422

02:19:13,270 --> 02:19:10,800

right i hope that

3423

02:19:14,230 --> 02:19:13,280

um and and maybe frankly it could very

3424

02:19:16,790 --> 02:19:14,240

well be the case

3425

02:19:17,750 --> 02:19:16,800

that like the technology once you have

3426

02:19:20,389 --> 02:19:17,760

the technology

3427

02:19:22,309 --> 02:19:20,399

then yeah it is as simple as do we go to

3428

02:19:23,030 --> 02:19:22,319

earth or do we go to planet zorgon

3429

02:19:26,230 --> 02:19:23,040

instead

3430

02:19:27,830 --> 02:19:26,240

right for lunch right right and zorgon's

3431

02:19:31,910 --> 02:19:27,840

got a great nightlife

3432

02:19:33,750 --> 02:19:31,920

so maybe they would go there but let me

3433

02:19:35,030 --> 02:19:33,760

let me ask you this concept because a

3434

02:19:38,070 --> 02:19:35,040

lot of uh

3435

02:19:41,270 --> 02:19:38,080

this has been uh laid out there

3436

02:19:42,070 --> 02:19:41,280

especially in the last 10 years uh with

3437

02:20:03,349 --> 02:19:42,080

a

3438

02:20:06,469 --> 02:20:03,359

just us

3439

02:20:07,190 --> 02:20:06,479

so it's you know um maybe not such a

3440

02:20:08,790 --> 02:20:07,200

strange

3441

02:20:11,429 --> 02:20:08,800

possibility when you look at the

3442

02:20:15,270 --> 02:20:11,439

behaviorisms writing the humanoid

3443

02:20:19,270 --> 02:20:15,280

uh figures uh um and just

3444

02:20:21,590 --> 02:20:19,280

sort of thinking uh let's say outside of

3445

02:20:24,950 --> 02:20:21,600

the box for a second

3446

02:20:26,710 --> 02:20:24,960

we are obsessed with controlling matter

3447

02:20:29,030 --> 02:20:26,720

right we're really good at that

3448

02:20:31,110 --> 02:20:29,040

what we suck at controlling and have

3449

02:20:33,429 --> 02:20:31,120

literally no control over right now is

3450

02:20:34,790 --> 02:20:33,439

time right that's the last thing that we

3451

02:20:38,230 --> 02:20:34,800

can manipulate

3452

02:20:40,389 --> 02:20:38,240

but um it's not so far-fetched to

3453

02:20:42,230 --> 02:20:40,399

imagine a future where we are so

3454

02:20:45,429 --> 02:20:42,240

obsessed with matter that

3455

02:20:45,910 --> 02:20:45,439

we figure it out right we we are in fact

3456

02:20:48,230 --> 02:20:45,920

like

3457

02:20:49,110 --> 02:20:48,240

give quantum computing maybe about 100

3458

02:20:51,429 --> 02:20:49,120

years max

3459

02:20:52,710 --> 02:20:51,439

we honest to god we'll have done it we

3460

02:20:55,429 --> 02:20:52,720

will have probably

3461

02:20:57,349 --> 02:20:55,439

have had a very very deep understanding

3462

02:20:59,110 --> 02:20:57,359

of matter or at least control a bit

3463

02:21:00,790 --> 02:20:59,120

even if we don't know the why behind it

3464

02:21:03,750 --> 02:21:00,800

right the philosophy

3465

02:21:05,270 --> 02:21:03,760

um so then naturally eventually though

3466

02:21:08,469 --> 02:21:05,280

what would be left is actually

3467

02:21:09,590 --> 02:21:08,479

is actual time travel right so i don't

3468

02:21:12,469 --> 02:21:09,600

know i don't think it's that

3469

02:21:14,150 --> 02:21:12,479

uh implausible anymore as it might have

3470

02:21:17,510 --> 02:21:14,160

been 100 or 200 years

3471

02:21:18,389 --> 02:21:17,520

ago um but you know we're constantly

3472

02:21:21,830 --> 02:21:18,399

seeing

3473

02:21:25,270 --> 02:21:21,840

these sort of paradoxes uh that come up

3474

02:21:28,630 --> 02:21:25,280

and then get resolved um

3475

02:21:31,750 --> 02:21:28,640

yeah so yeah with the uh

3476

02:21:35,110 --> 02:21:31,760

with the application of uh ai

3477

02:21:37,510 --> 02:21:35,120

uh combined into the craziness of

3478

02:21:39,030 --> 02:21:37,520

a functional quantum computer now we are

3479

02:21:43,670 --> 02:21:39,040

getting into

3480

02:21:46,710 --> 02:21:43,680

uh crazy amounts of research

3481

02:21:49,349 --> 02:21:46,720

being condensed from thousands of years

3482

02:21:50,950 --> 02:21:49,359

to just a couple of seconds because

3483

02:21:53,670 --> 02:21:50,960

that's actually

3484

02:21:55,030 --> 02:21:53,680

it will be the result of it that's right

3485

02:21:57,270 --> 02:21:55,040

that is absolutely right

3486

02:21:58,870 --> 02:21:57,280

yeah that's that's it so if that's the

3487

02:22:02,309 --> 02:21:58,880

case

3488

02:22:03,349 --> 02:22:02,319

is it um is it going to be a situation

3489

02:22:06,630 --> 02:22:03,359

where

3490

02:22:07,590 --> 02:22:06,640

uh and again i don't think this is crazy

3491

02:22:09,349 --> 02:22:07,600

talk

3492

02:22:11,990 --> 02:22:09,359

but is this going to be a situation

3493

02:22:16,309 --> 02:22:12,000

where we will be able to calculate

3494

02:22:20,550 --> 02:22:16,319

and and uh speculate

3495

02:22:23,030 --> 02:22:20,560

the types of uh alien biology

3496

02:22:24,070 --> 02:22:23,040

that would be out there and what they

3497

02:22:26,469 --> 02:22:24,080

physically

3498

02:22:27,349 --> 02:22:26,479

would consist of right ten fingers ten

3499

02:22:29,270 --> 02:22:27,359

toes

3500

02:22:30,710 --> 02:22:29,280

certain amount of height gravity on that

3501

02:22:33,110 --> 02:22:30,720

planet uh

3502

02:22:34,150 --> 02:22:33,120

uh chemicals in the atmosphere the

3503

02:22:37,750 --> 02:22:34,160

chemistry

3504

02:22:38,710 --> 02:22:37,760

boom this is what we can expect on this

3505

02:22:40,630 --> 02:22:38,720

planet

3506

02:22:42,070 --> 02:22:40,640

is that the kind of research that could

3507

02:22:45,349 --> 02:22:42,080

happen with ai

3508

02:22:47,670 --> 02:22:45,359

and and quantum computing 100

3509

02:22:49,510 --> 02:22:47,680

yes um and the reason why i say that

3510

02:22:52,550 --> 02:22:49,520

with so much confidence

3511

02:22:54,870 --> 02:22:52,560

uh is because the human body

3512

02:22:56,630 --> 02:22:54,880

is a series of you know chemical

3513

02:22:57,429 --> 02:22:56,640

reactions let's forget the medical

3514

02:23:00,550 --> 02:22:57,439

physics

3515

02:23:03,429 --> 02:23:00,560

it's a

3516

02:23:05,030 --> 02:23:03,439

series of of cells and those cells are

3517

02:23:06,389 --> 02:23:05,040

made of chemical reactions and those

3518

02:23:08,950 --> 02:23:06,399

chemical reactions

3519

02:23:10,710 --> 02:23:08,960

are described by quantum mechanics uh

3520

02:23:12,950 --> 02:23:10,720

all chemical reactions

3521

02:23:15,030 --> 02:23:12,960

are quantum mechanical in nature and so

3522

02:23:17,429 --> 02:23:15,040

therefore they can all be described

3523

02:23:18,550 --> 02:23:17,439

by a quantum computer and simulated by

3524

02:23:21,830 --> 02:23:18,560

quantum computer

3525

02:23:23,429 --> 02:23:21,840

and predicted right exactly right so

3526
02:23:24,070 --> 02:23:23,439
that we can just predict you know what

3527
02:23:26,710 --> 02:23:24,080
will life

3528
02:23:28,150 --> 02:23:26,720
look like what can life what are even

3529
02:23:29,830 --> 02:23:28,160
the definitive

3530
02:23:32,230 --> 02:23:29,840
ways that life can take on what is the

3531
02:23:33,990 --> 02:23:32,240
finite set right we can start simulating

3532
02:23:35,990 --> 02:23:34,000
that once we have enough compute

3533
02:23:37,830 --> 02:23:36,000
uh once our quantum computers are

3534
02:23:40,870 --> 02:23:37,840
powerful enough yeah we're not there yet

3535
02:23:45,429 --> 02:23:40,880
are we i mean with ibm's uh

3536
02:23:48,070 --> 02:23:45,439
blue brain or or or china's

3537
02:23:50,630 --> 02:23:48,080
brandontown system are they're not

3538
02:23:53,750 --> 02:23:50,640

advanced enough yet right

3539

02:23:56,309 --> 02:23:53,760

so yeah the the ibmq uh

3540

02:23:57,349 --> 02:23:56,319

system like they're it's none of those

3541

02:23:59,670 --> 02:23:57,359

are yeah

3542

02:24:01,990 --> 02:23:59,680

there's nothing out there so that's the

3543

02:24:05,190 --> 02:24:02,000

thing that the quantum computing fields

3544

02:24:06,870 --> 02:24:05,200

is is gunning for it's like uh um

3545

02:24:09,030 --> 02:24:06,880

you know it's just like a competition

3546

02:24:11,670 --> 02:24:09,040

it's the first whoever finds

3547

02:24:12,309 --> 02:24:11,680

who whichever person finds like the

3548

02:24:14,550 --> 02:24:12,319

first

3549

02:24:15,910 --> 02:24:14,560

useful application of a quantum computer

3550

02:24:17,990 --> 02:24:15,920

like like today that one

3551
02:24:19,910 --> 02:24:18,000
one we can use today that actually gives

3552
02:24:22,550 --> 02:24:19,920
an advantage in research

3553
02:24:23,910 --> 02:24:22,560
will become you know a billionaire and

3554
02:24:26,790 --> 02:24:23,920
they'll also

3555
02:24:27,990 --> 02:24:26,800
uh more importantly though have uh

3556
02:24:30,550 --> 02:24:28,000
established a new way

3557
02:24:32,630 --> 02:24:30,560
of doing science and engineering and we

3558
02:24:33,429 --> 02:24:32,640
all know that it's inevitable it's gonna

3559
02:24:35,990 --> 02:24:33,439
happen

3560
02:24:36,870 --> 02:24:36,000
it's more about if and it's more about

3561
02:24:39,910 --> 02:24:36,880
when not if

3562
02:24:43,750 --> 02:24:39,920
sorry and what would be

3563
02:24:45,510 --> 02:24:43,760

if you had your uh your choice

3564

02:24:48,790 --> 02:24:45,520

right yeah somebody came to you said

3565

02:24:51,910 --> 02:24:48,800

okay all right here we go

3566

02:24:55,510 --> 02:24:51,920

what's your first application is it

3567

02:24:57,750 --> 02:24:55,520

to search for exoplanets

3568

02:24:59,429 --> 02:24:57,760

life out there in the universe is it

3569

02:25:02,469 --> 02:24:59,439

something more terrestrial

3570

02:25:04,230 --> 02:25:02,479

if if you had your your dream scenario

3571

02:25:05,190 --> 02:25:04,240

what's your first application for a

3572

02:25:08,870 --> 02:25:05,200

quantum computer

3573

02:25:10,790 --> 02:25:08,880

and you could do anything you wanted

3574

02:25:12,309 --> 02:25:10,800

that's awesome what i would do the first

3575

02:25:15,830 --> 02:25:12,319

thing i would do jimmy

3576

02:25:18,870 --> 02:25:15,840

is i would run through every single

3577

02:25:19,190 --> 02:25:18,880

biological simulation i could come up

3578

02:25:20,710 --> 02:25:19,200

with

3579

02:25:22,870 --> 02:25:20,720

automated right i would get one

3580

02:25:24,230 --> 02:25:22,880

simulation agent to do it for me like an

3581

02:25:26,630 --> 02:25:24,240

ai uh

3582

02:25:27,750 --> 02:25:26,640

and then keep and then see and just wait

3583

02:25:30,790 --> 02:25:27,760

and watch

3584

02:25:32,790 --> 02:25:30,800

until life comes out of that simulation

3585

02:25:35,110 --> 02:25:32,800

and then i would know exactly what

3586

02:25:38,150 --> 02:25:35,120

chemicals and what chemical reactions

3587

02:25:42,550 --> 02:25:38,160

and pathways are required to create life

3588

02:25:49,110 --> 02:25:45,590

we all are in some ways

3589

02:25:52,309 --> 02:25:49,120

oh yeah and see i think that

3590

02:25:54,790 --> 02:25:52,319

um we are getting so close this is

3591

02:25:56,550 --> 02:25:54,800

what i find probably most interesting

3592

02:25:57,590 --> 02:25:56,560

and fascinating about where science is

3593

02:26:00,230 --> 02:25:57,600

today

3594

02:26:01,429 --> 02:26:00,240

that if you're an astronomer if you're a

3595

02:26:05,830 --> 02:26:01,439

physicist

3596

02:26:06,309 --> 02:26:05,840

if you're a scientist you are focused on

3597

02:26:09,349 --> 02:26:06,319

uh

3598

02:26:12,309 --> 02:26:09,359

one thing are we alone or not

3599

02:26:13,030 --> 02:26:12,319

it seems like everybody wants to get to

3600

02:26:17,349 --> 02:26:13,040

the

3601

02:26:20,630 --> 02:26:17,359

chasing it down but we are doing it

3602

02:26:23,110 --> 02:26:20,640

with hypotheticals right everything is a

3603

02:26:25,270 --> 02:26:23,120

hypothetical we're able to

3604

02:26:26,389 --> 02:26:25,280

you know get numbers on exoplanets and

3605

02:26:29,510 --> 02:26:26,399

we're able to

3606

02:26:31,670 --> 02:26:29,520

guess and we're able but it's all

3607

02:26:32,950 --> 02:26:31,680

theory it's all hypotheticals it's all

3608

02:26:35,510 --> 02:26:32,960

guesswork

3609

02:26:36,389 --> 02:26:35,520

um and that's where things are pressing

3610

02:26:38,710 --> 02:26:36,399

forward

3611

02:26:40,950 --> 02:26:38,720

and if we just have the ability to take

3612

02:26:44,150 --> 02:26:40,960

things to the next step where we can get

3613

02:26:45,670 --> 02:26:44,160

uh absolute results and measurements

3614

02:26:47,429 --> 02:26:45,680

i think that's where the focus is gonna

3615

02:26:48,389 --> 02:26:47,439

go i think we're gonna continue to look

3616

02:26:50,710 --> 02:26:48,399

to the stars

3617

02:26:52,630 --> 02:26:50,720

and i'm sure that e.t is doing the same

3618

02:26:55,349 --> 02:26:52,640

thing

3619

02:26:56,950 --> 02:26:55,359

looking for us that's so true that's

3620

02:26:59,110 --> 02:26:56,960

beautifully said

3621

02:27:01,590 --> 02:26:59,120

thank you so much so what's next up man

3622

02:27:04,790 --> 02:27:01,600

what are you guys working on now

3623

02:27:06,309 --> 02:27:04,800

so um yeah so we're working on i'll i'll

3624

02:27:08,469 --> 02:27:06,319

be very broad just because

3625

02:27:09,670 --> 02:27:08,479

we're being somewhat quite about it but

3626

02:27:12,389 --> 02:27:09,680

we're working

3627

02:27:12,950 --> 02:27:12,399

on i i'll tell you right now is going to

3628

02:27:15,429 --> 02:27:12,960

be

3629

02:27:15,990 --> 02:27:15,439

probably the most advanced quantum

3630

02:27:19,270 --> 02:27:16,000

condensed

3631

02:27:21,910 --> 02:27:19,280

matter physics simulation uh

3632

02:27:22,630 --> 02:27:21,920

ever done and so uh condensed matter

3633

02:27:30,469 --> 02:27:22,640

physics

3634

02:27:33,270 --> 02:27:30,479

to condensed matter systems

3635

02:27:35,110 --> 02:27:33,280

such as superconductors um and

3636

02:27:38,630 --> 02:27:35,120

semiconductors and stuff like that

3637

02:27:42,309 --> 02:27:38,640

so yeah we're really just looking into

3638

02:27:43,990 --> 02:27:42,319

being able to uh use the most powerful

3639

02:27:47,190 --> 02:27:44,000

quantum compute platforms that we can

3640

02:27:49,750 --> 02:27:47,200

get our hands on and and prove

3641

02:27:50,870 --> 02:27:49,760

what can and can't be done uh with

3642

02:27:53,110 --> 02:27:50,880

quantum computers

3643

02:27:54,710 --> 02:27:53,120

uh and with respect to you know

3644

02:27:57,670 --> 02:27:54,720

discovering

3645

02:27:58,950 --> 02:27:57,680

materials that we we think might take

3646

02:28:01,670 --> 02:27:58,960

centuries to discover

3647

02:28:02,950 --> 02:28:01,680

otherwise we just want to show uh over

3648

02:28:05,349 --> 02:28:02,960

the next 12 months

3649

02:28:06,710 --> 02:28:05,359

you know and we'll have like we'll be

3650

02:28:09,110 --> 02:28:06,720

public about it we'll have

3651
02:28:11,190 --> 02:28:09,120
public press releases and stuff we want

3652
02:28:12,389 --> 02:28:11,200
to show that the science exists that

3653
02:28:14,230 --> 02:28:12,399
that this stuff

3654
02:28:16,070 --> 02:28:14,240
is there you know and that we're going

3655
02:28:16,710 --> 02:28:16,080
to be at the forefront of it and that we

3656
02:28:19,190 --> 02:28:16,720
are

3657
02:28:20,870 --> 02:28:19,200
so yeah like keep an eye out for that

3658
02:28:21,510 --> 02:28:20,880
pretty exciting stuff man pretty

3659
02:28:24,630 --> 02:28:21,520
exciting

3660
02:28:25,990 --> 02:28:24,640
and uh i look forward to uh hanging out

3661
02:28:28,389 --> 02:28:26,000
with you at some point breaking some

3662
02:28:30,950 --> 02:28:28,399
bread once we get behind uh

3663
02:28:31,590 --> 02:28:30,960

all of this quarantine and lockdown but

3664

02:28:36,630 --> 02:28:31,600

hopefully

3665

02:28:38,389 --> 02:28:36,640

a whole another brand new fresh year

3666

02:28:40,230 --> 02:28:38,399

thank you so much deep

3667

02:28:41,750 --> 02:28:40,240

thank you so much as well jimmy have a

3668

02:28:43,510 --> 02:28:41,760

great night buddy yeah you too

3669

02:28:45,030 --> 02:28:43,520

enjoy your night and thank you so much

3670

02:28:47,270 --> 02:28:45,040

great conversation

3671

02:28:48,309 --> 02:28:47,280

and uh for everybody out there deep is

3672

02:28:49,830 --> 02:28:48,319

deep neuron

3673

02:28:51,830 --> 02:28:49,840

right there on twitter you can go and

3674

02:28:54,469 --> 02:28:51,840

chase him down and follow him on twitter

3675

02:28:55,750 --> 02:28:54,479

and of course his website is reactiveq

3676

02:28:58,870 --> 02:28:55,760

and the links are over

3677

02:29:00,550 --> 02:28:58,880

at jimmychurchradio.com all right i'm

3678

02:29:02,230 --> 02:29:00,560

going to take a quick break

3679

02:29:04,389 --> 02:29:02,240

and when i come back thank you so much

3680

02:29:08,870 --> 02:29:04,399

deep when i come back i'm going to take

3681

02:29:11,429 --> 02:29:08,880

your phone calls 747-2282

3682

02:29:31,510 --> 02:29:11,439

open lines are next this is fade to

3683

02:29:36,710 --> 02:29:33,910

hey what up y'all biblical fox here and

3684

02:29:41,030 --> 02:29:36,720

you are listening to my boy jimmy church

3685

02:29:47,910 --> 02:29:44,309

despite popular opinion reading a book

3686

02:29:53,349 --> 02:29:51,590

but listening to jimmy church will

3687

02:29:55,349 --> 02:29:53,359

this is jimmy church of fade to black

3688

02:29:58,550 --> 02:29:55,359

and i take life change t

3689

02:29:59,270 --> 02:29:58,560

supplements every single day it's what i

3690

02:30:02,830 --> 02:29:59,280

do

3691

02:30:07,590 --> 02:30:05,429

jimmychurchradio.com

3692

02:30:10,230 --> 02:30:07,600

when you take the beans from central

3693

02:30:10,790 --> 02:30:10,240

america with dashes of indonesian and

3694

02:30:13,030 --> 02:30:10,800

african

3695

02:30:15,110 --> 02:30:13,040

mixed in and then roasted to the dark

3696

02:30:18,309 --> 02:30:15,120

side of fade to black

3697

02:30:21,270 --> 02:30:18,319

you create the ultimate brew of fringe

3698

02:30:22,950 --> 02:30:21,280

introducing the fade to black blend from

3699

02:30:25,910 --> 02:30:22,960

river moon coffee

3700

02:30:28,070 --> 02:30:25,920

yes river moon's darkest customized

3701

02:30:31,190 --> 02:30:28,080

roast was created for the love

3702

02:30:32,550 --> 02:30:31,200

of fade to black the alchemy of

3703

02:30:35,349 --> 02:30:32,560

masterful roasting

3704

02:30:36,710 --> 02:30:35,359

and smoking the beans is in every sip of

3705

02:30:40,309 --> 02:30:36,720

this full-bodied

3706

02:30:42,870 --> 02:30:40,319

dark java i need my coffee doc

3707

02:30:43,830 --> 02:30:42,880

deep with distinct bittersweet chocolate

3708

02:30:46,469 --> 02:30:43,840

highlights

3709

02:30:48,389 --> 02:30:46,479

just like the bunker leaning further

3710

02:30:51,110 --> 02:30:48,399

into the darkness of the roast

3711

02:30:51,990 --> 02:30:51,120

is fade to black blend from river moon

3712

02:30:53,710 --> 02:30:52,000

coffee

3713

02:30:55,750 --> 02:30:53,720

just click on the banner at

3714

02:30:56,150 --> 02:30:55,760

jimmychurchradio.com and use the promo

3715

02:31:00,630 --> 02:30:56,160

code

3716

02:31:04,150 --> 02:31:00,640

f2b blend for 15 off of your order today

3717

02:31:07,750 --> 02:31:06,150

hello my name is billy carson and i'm a

3718

02:31:09,429 --> 02:31:07,760

best-selling author and the founder of

3719

02:31:11,110 --> 02:31:09,439

forbidden knowledge dot tv

3720

02:31:13,349 --> 02:31:11,120

together with my team we have built a

3721

02:31:14,950 --> 02:31:13,359

all new contest streaming tv platform

3722

02:31:15,510 --> 02:31:14,960

designed with every family member in

3723

02:31:17,030 --> 02:31:15,520

mind

3724

02:31:18,710 --> 02:31:17,040

if you have ever wanted to travel the

3725

02:31:20,150 --> 02:31:18,720

world and attend lectures and workshops

3726

02:31:20,790 --> 02:31:20,160

from your favorite speakers but weren't

3727

02:31:23,510 --> 02:31:20,800

able to

3728

02:31:24,150 --> 02:31:23,520

look no further forbidden knowledge dot

3729

02:31:25,830 --> 02:31:24,160

tv

3730

02:31:27,670 --> 02:31:25,840

there are dozens of workshops and

3731

02:31:29,750 --> 02:31:27,680

lectures from speakers you know and love

3732

02:31:31,670 --> 02:31:29,760

we have also included amazing categories

3733

02:31:33,510 --> 02:31:31,680

to assure that your consciousness is

3734

02:31:34,150 --> 02:31:33,520

entertained and elevating on a daily

3735

02:31:36,230 --> 02:31:34,160

basis

3736

02:31:37,429 --> 02:31:36,240

amazing interviews ancient history

3737

02:31:40,830 --> 02:31:37,439

ascension knowledge

3738

02:31:42,389 --> 02:31:40,840

wisdom teachings documentaries

3739

02:31:44,790 --> 02:31:42,399

conspiracies

3740

02:31:46,950 --> 02:31:44,800

conscious cooking meditations finance

3741

02:31:49,270 --> 02:31:46,960

yoga and so much more to start your free

3742

02:31:51,990 --> 02:31:49,280

trial on any mobile device or computer

3743

02:31:53,670 --> 02:31:52,000

surf to forbidden knowledge dot tv

3744

02:31:56,790 --> 02:31:53,680

that's forbidden knowledge with the

3745

02:31:59,190 --> 02:31:56,800

number four forbidden knowledge dot tv

3746

02:32:01,270 --> 02:31:59,200

again visit forbidden knowledge dot tv

3747

02:32:03,429 --> 02:32:01,280

today

3748

02:32:04,469 --> 02:32:03,439

are you intrigued by paranormal talk

3749

02:32:06,950 --> 02:32:04,479

radio you

3750

02:32:07,830 --> 02:32:06,960

love the new paranormal radio app from

3751

02:32:10,389 --> 02:32:07,840

talk stream

3752

02:32:12,469 --> 02:32:10,399

live you'll find a great selection of

3753

02:32:15,590 --> 02:32:12,479

talk shows covering ufos

3754

02:32:17,990 --> 02:32:15,600

ghosts strange phenomena and much more

3755

02:32:19,750 --> 02:32:18,000

download the paranormal radio app now

3756

02:32:21,670 --> 02:32:19,760

and start listening to the very best in

3757

02:32:23,190 --> 02:32:21,680

paranormal talk entertainment

3758

02:32:26,070 --> 02:32:23,200

including the network you're listening

3759

02:32:36,830 --> 02:32:26,080

to right now the paranormal radio app

3760

02:32:41,429 --> 02:32:38,389

store

3761

02:32:51,110 --> 02:32:41,439

it's not a lifestyle we chose we were

3762

02:33:17,910 --> 02:33:07,080

is kgraradio.com jimmychurchradio.com

3763

02:33:24,790 --> 02:33:21,750

don't worry i'm here i'm back i sat down

3764

02:33:27,270 --> 02:33:24,800

that's right thank you to deep prasad

3765

02:33:27,990 --> 02:33:27,280

absolutely fascinating conversation and

3766

02:33:33,270 --> 02:33:28,000

i have

3767

02:33:37,590 --> 02:33:35,429

five 747-228-2051 lots of seven four

3768

02:33:40,070 --> 02:33:37,600

seven two two eight two zero five one

3769

02:33:42,230 --> 02:33:40,080

and i've got one segment left and uh i

3770

02:33:45,110 --> 02:33:42,240

do wanna hear from you because there are

3771

02:33:45,750 --> 02:33:45,120

uh a a few very interesting concepts

3772

02:33:49,190 --> 02:33:45,760

here

3773

02:33:52,309 --> 02:33:49,200

uh many were presented tonight

3774

02:33:55,349 --> 02:33:52,319

but one of the things

3775

02:33:59,030 --> 02:33:55,359

now let's stay on this also

3776

02:34:00,550 --> 02:33:59,040

uh the movie uh the social dilemma

3777

02:34:01,990 --> 02:34:00,560

uh that i mentioned in the opening of

3778

02:34:03,830 --> 02:34:02,000

the show i want to know if you've seen

3779

02:34:06,550 --> 02:34:03,840

it yet and if you have

3780

02:34:06,870 --> 02:34:06,560

i would like your comments on on that

3781

02:34:08,710 --> 02:34:06,880

too

3782

02:34:10,710 --> 02:34:08,720

as well i don't want to let that go we

3783

02:34:13,510 --> 02:34:10,720

will certainly be discussing it

3784

02:34:14,309 --> 02:34:13,520

uh this thursday on fader night uh going

3785

02:34:17,349 --> 02:34:14,319

back to uh

3786

02:34:19,429 --> 02:34:17,359

uh the conversation with deep is what i

3787

02:34:24,469 --> 02:34:19,439

want to hear from you when i

3788

02:34:27,590 --> 02:34:24,479

lay out a couple of ideas

3789

02:34:29,270 --> 02:34:27,600

listen when we are talking about general

3790

02:34:30,790 --> 02:34:29,280

and special relativity

3791

02:34:32,389 --> 02:34:30,800

we're talking about the way einstein

3792

02:34:35,910 --> 02:34:32,399

laid it out and those

3793

02:34:39,270 --> 02:34:35,920

basic uh constraints that have been

3794

02:34:43,349 --> 02:34:39,280

laid out there specifically the

3795

02:34:46,790 --> 02:34:43,359

elegant equation e equals $m c$ squared

3796

02:34:47,990 --> 02:34:46,800

that right you need to stop right there

3797

02:34:51,349 --> 02:34:48,000

right and most

3798

02:34:53,590 --> 02:34:51,359

physicists do because when you

3799

02:34:55,590 --> 02:34:53,600

are talking about what if you just stay

3800

02:34:56,469 --> 02:34:55,600

within that the speed of light is

3801
02:34:59,670 --> 02:34:56,479
constant

3802
02:35:02,790 --> 02:34:59,680
which is that's it if the speed of light

3803
02:35:06,389 --> 02:35:02,800
is constant and that's where we sit

3804
02:35:09,750 --> 02:35:06,399
then the traveling

3805
02:35:10,830 --> 02:35:09,760
because space is big space is big the

3806
02:35:14,230 --> 02:35:10,840
distance between

3807
02:35:15,590 --> 02:35:14,240
stars is is crazy forget about the

3808
02:35:19,429 --> 02:35:15,600
distances between

3809
02:35:21,190 --> 02:35:19,439
galaxies stay between stars

3810
02:35:22,550 --> 02:35:21,200
and stay inside of our own milky way

3811
02:35:25,270 --> 02:35:22,560
those distances are so

3812
02:35:26,389 --> 02:35:25,280
vast that traveling at the speed of

3813
02:35:30,630 --> 02:35:26,399

light

3814

02:35:33,990 --> 02:35:30,640

ripping

3815

02:35:36,790 --> 02:35:34,000

then traveling interstellar

3816

02:35:38,230 --> 02:35:36,800

just takes enormous amounts of time

3817

02:35:42,389 --> 02:35:38,240

concepts that we just

3818

02:35:46,309 --> 02:35:42,399

can't understand so when we look at

3819

02:35:47,590 --> 02:35:46,319

earth and we look at a craft like the

3820

02:35:49,590 --> 02:35:47,600

tic tac

3821

02:35:51,750 --> 02:35:49,600

then we gotta stop right there and go

3822

02:35:55,110 --> 02:35:51,760

okay if that's extraterrestrial how

3823

02:35:59,429 --> 02:35:55,120

how did it get here how

3824

02:36:02,469 --> 02:35:59,439

did it get here

3825

02:36:06,710 --> 02:36:02,479

right and if you look at

3826

02:36:08,469 --> 02:36:06,720

um earth and you look at the closest

3827

02:36:11,429 --> 02:36:08,479

stars around us

3828

02:36:12,389 --> 02:36:11,439

that are within 50 light years and let

3829

02:36:13,750 --> 02:36:12,399

me stand this

3830

02:36:17,990 --> 02:36:13,760

for a second because then we're going to

3831

02:36:20,150 --> 02:36:18,000

get to the warp drive and folding space

3832

02:36:22,710 --> 02:36:20,160

okay so here's the earth and right

3833

02:36:26,950 --> 02:36:22,720

around the earth you know

3834

02:36:29,830 --> 02:36:26,960

the reason why i suggest 50 light years

3835

02:36:30,950 --> 02:36:29,840

is easy but you have to understand where

3836

02:36:33,990 --> 02:36:30,960

i'm going with this

3837

02:36:35,190 --> 02:36:34,000

so let me lay it out there for you okay

3838

02:36:38,230 --> 02:36:35,200

so here's the earth

3839

02:36:39,270 --> 02:36:38,240

50 light years away the reason why that

3840

02:36:42,309 --> 02:36:39,280

is important

3841

02:36:45,750 --> 02:36:42,319

is earth has been

3842

02:36:47,990 --> 02:36:45,760

sending out signals of life with

3843

02:36:49,110 --> 02:36:48,000

radio and television signals for about a

3844

02:36:52,070 --> 02:36:49,120

hundred years

3845

02:36:53,670 --> 02:36:52,080

a little longer but let's just say a

3846

02:36:57,590 --> 02:36:53,680

hundred years

3847

02:37:00,790 --> 02:36:57,600

so 100 light years out

3848

02:37:04,309 --> 02:37:00,800

right but you would need to

3849

02:37:08,790 --> 02:37:04,319

get a response back

3850

02:37:11,990 --> 02:37:08,800

so that's actually 50 light years

3851
02:37:15,030 --> 02:37:12,000
you dig it 50 light years out

3852
02:37:17,030 --> 02:37:15,040
50 light years back and there's your 100

3853
02:37:21,110 --> 02:37:17,040
years

3854
02:37:24,630 --> 02:37:21,120
so we would expect we would expect

3855
02:37:26,550 --> 02:37:24,640
that out of those 200 250 stars that are

3856
02:37:29,670 --> 02:37:26,560
about 50 light years 50

3857
02:37:32,950 --> 02:37:29,680
light years that's a long it's a

3858
02:37:34,389 --> 02:37:32,960
big chunk of distance leaving out alpha

3859
02:37:38,389 --> 02:37:34,399
centauri by the way

3860
02:37:42,870 --> 02:37:38,399
okay so we would expect

3861
02:37:46,389 --> 02:37:42,880
that a response

3862
02:37:47,270 --> 02:37:46,399
could it be you know something like the

3863
02:37:50,790 --> 02:37:47,280

tic tac

3864

02:37:53,830 --> 02:37:50,800

being a probe sent to

3865

02:37:55,910 --> 02:37:53,840

earth to check us out from a

3866

02:37:58,790 --> 02:37:55,920

civilization that is within

3867

02:37:59,750 --> 02:37:58,800

50 light years of earth they've got the

3868

02:38:01,590 --> 02:37:59,760

signals

3869

02:38:03,429 --> 02:38:01,600

they sent something here and it took 50

3870

02:38:07,469 --> 02:38:03,439

light years to get here

3871

02:38:09,670 --> 02:38:07,479

and boom that is staying within

3872

02:38:11,910 --> 02:38:09,680

einstein's general and special

3873

02:38:12,630 --> 02:38:11,920

relativity and of course equals mc

3874

02:38:16,150 --> 02:38:12,640

squared

3875

02:38:19,190 --> 02:38:16,160

and the speed of light is constant that

3876

02:38:20,870 --> 02:38:19,200

is where we need to stay inside of our

3877

02:38:23,110 --> 02:38:20,880

laws of physics the way that we

3878

02:38:26,790 --> 02:38:23,120

understand them today

3879

02:38:29,670 --> 02:38:26,800

that's where what is the tic tac

3880

02:38:31,429 --> 02:38:29,680

or anything else that we see in the sky

3881

02:38:34,150 --> 02:38:31,439

right

3882

02:38:35,510 --> 02:38:34,160

if and a lot of this stuff has happened

3883

02:38:37,349 --> 02:38:35,520

since 1947

3884

02:38:39,030 --> 02:38:37,359

a lot of things have happened in the

3885

02:38:41,910 --> 02:38:39,040

last 10 or 20 years

3886

02:38:44,309 --> 02:38:41,920

and a lot of stuff really crazy stuff

3887

02:38:47,750 --> 02:38:44,319

has happened within the last 10 years

3888

02:38:51,990 --> 02:38:47,760

tic-tac being uh 2004.

3889

02:38:53,830 --> 02:38:52,000

that being said does that fall within

3890

02:38:56,150 --> 02:38:53,840

this concept of the earth being in the

3891

02:38:58,230 --> 02:38:56,160

middle 50 light years out

3892

02:39:00,389 --> 02:38:58,240

and then something being sent here and

3893

02:39:03,750 --> 02:39:00,399

arriving we would expect to start

3894

02:39:07,270 --> 02:39:03,760

seeing things and hearing things

3895

02:39:09,990 --> 02:39:07,280

now today

3896

02:39:11,670 --> 02:39:10,000

i wouldn't be surprised if we started

3897

02:39:15,030 --> 02:39:11,680

getting

3898

02:39:17,270 --> 02:39:15,040

radio signals on our frequency because

3899

02:39:20,630 --> 02:39:17,280

that's what we sent them out at

3900

02:39:24,070 --> 02:39:20,640

and would et have a general

3901

02:39:25,830 --> 02:39:24,080

sense of our language by that point

3902

02:39:28,469 --> 02:39:25,840

right because the language is coming out

3903

02:39:31,110 --> 02:39:28,479

have they figured out that puzzle

3904

02:39:31,510 --> 02:39:31,120

um is it at a frequency that they can

3905

02:39:34,630 --> 02:39:31,520

well

3906

02:39:37,110 --> 02:39:34,640

eventually they would they would hone in

3907

02:39:38,150 --> 02:39:37,120

figure out what these signals are and

3908

02:39:41,830 --> 02:39:38,160

and listen to them

3909

02:39:44,550 --> 02:39:41,840

and possibly watch them yes okay

3910

02:39:45,349 --> 02:39:44,560

would they be able to triangulate and

3911

02:39:47,349 --> 02:39:45,359

figure out

3912

02:39:48,870 --> 02:39:47,359

where they are coming from yes of course

3913

02:39:51,110 --> 02:39:48,880

they would so

3914

02:39:51,990 --> 02:39:51,120

what are the ages of these stars and the

3915

02:39:54,150 --> 02:39:52,000

so and the

3916

02:39:55,429 --> 02:39:54,160

and the solar system the planet systems

3917

02:39:58,389 --> 02:39:55,439

that are around them

3918

02:39:58,950 --> 02:39:58,399

are they it far enough advanced in front

3919

02:40:01,030 --> 02:39:58,960

of us

3920

02:40:02,950 --> 02:40:01,040

that they would have the capability to

3921

02:40:05,190 --> 02:40:02,960

turn around and do interstellar travel

3922

02:40:06,309 --> 02:40:05,200

and get back to earth possibility is

3923

02:40:08,150 --> 02:40:06,319

there too

3924

02:40:10,870 --> 02:40:08,160

so you would have to and again i always

3925

02:40:13,510 --> 02:40:10,880

go back to the math i always go back to

3926

02:40:15,510 --> 02:40:13,520

the basics of the basics what are what

3927

02:40:19,030 --> 02:40:15,520

are we within

3928

02:40:23,830 --> 02:40:19,040

so i would expect

3929

02:40:26,469 --> 02:40:23,840

stuff to start happening now

3930

02:40:27,990 --> 02:40:26,479

every year that goes by it reaches

3931

02:40:31,590 --> 02:40:28,000

further out

3932

02:40:35,269 --> 02:40:31,600

right so 150 years from now

3933

02:40:36,469 --> 02:40:35,279

right now we're 75 years light years out

3934

02:40:39,030 --> 02:40:36,479

from planet earth

3935

02:40:40,230 --> 02:40:39,040

more stars more possibility it's a

3936

02:40:41,750 --> 02:40:40,240

numbers game

3937

02:40:45,030 --> 02:40:41,760

of reaching out to an advanced

3938

02:40:47,750 --> 02:40:45,040

civilization and that is staying within

3939

02:40:49,190 --> 02:40:47,760

einstein's special and general

3940

02:40:52,469 --> 02:40:49,200

relativity

3941

02:40:56,150 --> 02:40:52,479

that being said the other

3942

02:40:59,910 --> 02:40:56,160

part of this where it would

3943

02:41:01,349 --> 02:40:59,920

seem to violate all of our known laws of

3944

02:41:05,830 --> 02:41:01,359

physics

3945

02:41:09,110 --> 02:41:05,840

is the ability to ignore

3946

02:41:12,550 --> 02:41:09,120

speed of light so if you are now

3947

02:41:13,030 --> 02:41:12,560

and when i say fold space right okay so

3948

02:41:15,910 --> 02:41:13,040

let's

3949

02:41:17,269 --> 02:41:15,920

just say this piece of paper is space

3950

02:41:19,910 --> 02:41:17,279

you have point a

3951
02:41:20,950 --> 02:41:19,920
right here that's earth and you've got

3952
02:41:24,150 --> 02:41:20,960
another point

3953
02:41:26,950 --> 02:41:24,160
over here and this is

3954
02:41:27,670 --> 02:41:26,960
uh a thousand light years too far to

3955
02:41:30,790 --> 02:41:27,680
travel

3956
02:41:31,269 --> 02:41:30,800
but if there is a way to do this and

3957
02:41:35,269 --> 02:41:31,279
then

3958
02:41:39,030 --> 02:41:35,279
go through these two points like that

3959
02:41:42,389 --> 02:41:39,040
and fold space where it's not

3960
02:41:44,070 --> 02:41:42,399
any distance at all but if this

3961
02:41:47,269 --> 02:41:44,080
is the case and that's a thousand light

3962
02:41:49,110 --> 02:41:47,279
years are you still traveling

3963
02:41:51,510 --> 02:41:49,120

technically at the speed of light if you

3964

02:41:52,710 --> 02:41:51,520

are connecting the dots like that that's

3965

02:41:54,150 --> 02:41:52,720

folding space

3966

02:41:55,750 --> 02:41:54,160

this is something that has been talked

3967

02:41:57,990 --> 02:41:55,760

about a lot in the world of

3968

02:41:59,349 --> 02:41:58,000

physics and astrophysics and and

3969

02:42:01,910 --> 02:41:59,359

einstein

3970

02:42:02,389 --> 02:42:01,920

the reason why i find that so important

3971

02:42:04,550 --> 02:42:02,399

is

3972

02:42:06,230 --> 02:42:04,560

we don't know deep just said we haven't

3973

02:42:06,790 --> 02:42:06,240

been able to test that there's no way to

3974

02:42:09,910 --> 02:42:06,800

know

3975

02:42:12,469 --> 02:42:09,920

what happens to your watch or time

3976

02:42:14,070 --> 02:42:12,479

your age we don't know these things what

3977

02:42:17,990 --> 02:42:14,080

would happen

3978

02:42:25,349 --> 02:42:21,190

that type of travel to go from

3979

02:42:26,070 --> 02:42:25,359

andromeda to here and to be able to fold

3980

02:42:29,510 --> 02:42:26,080

space

3981

02:42:31,349 --> 02:42:29,520

where and i i keep saying this i don't

3982

02:42:32,950 --> 02:42:31,359

want to sound like the movie dune

3983

02:42:35,190 --> 02:42:32,960

but fundamentally that's what you would

3984

02:42:39,349 --> 02:42:35,200

have to be able to do

3985

02:42:43,510 --> 02:42:39,359

with a warp drive it's the same concept

3986

02:42:46,950 --> 02:42:43,520

the warp drive um

3987

02:42:49,349 --> 02:42:46,960

i'm going to stay basic here is removing

3988

02:42:52,550 --> 02:42:49,359

the space that is in front of you

3989

02:42:55,750 --> 02:42:52,560

and putting it in back of you

3990

02:42:58,070 --> 02:42:55,760

in real time now it takes a lot of uh

3991

02:42:59,910 --> 02:42:58,080

energy and the math and it doesn't

3992

02:43:03,190 --> 02:42:59,920

really work out

3993

02:43:05,990 --> 02:43:03,200

in our world it doesn't work it's just

3994

02:43:08,150 --> 02:43:06,000

we're talking about the the energy of

3995

02:43:11,750 --> 02:43:08,160

millions of suns

3996

02:43:15,110 --> 02:43:11,760

okay all right but

3997

02:43:17,190 --> 02:43:15,120

e.t would have figured this out

3998

02:43:18,950 --> 02:43:17,200

and advancingly because we are going to

3999

02:43:21,349 --> 02:43:18,960

figure it out one day and we're really

4000

02:43:23,349 --> 02:43:21,359

close we have the idea for it

4001
02:43:24,469 --> 02:43:23,359
we just haven't been able to get to it

4002
02:43:27,990 --> 02:43:24,479
yet

4003
02:43:29,910 --> 02:43:28,000
but with a warp drive

4004
02:43:31,590 --> 02:43:29,920
where you are removing space from here

4005
02:43:34,389 --> 02:43:31,600
putting it behind your ship

4006
02:43:36,389 --> 02:43:34,399
and technically your ship isn't moving

4007
02:43:37,590 --> 02:43:36,399
it's not traveling at the speed of light

4008
02:43:40,469 --> 02:43:37,600
you're just using

4009
02:43:42,070 --> 02:43:40,479
energy to remove the space in front of

4010
02:43:43,990 --> 02:43:42,080
you and put it in back of you

4011
02:43:46,150 --> 02:43:44,000
your ship itself it's not getting red

4012
02:43:48,230 --> 02:43:46,160
hot it's not increasing mass it's not

4013
02:43:49,750 --> 02:43:48,240

doing any of those things

4014

02:43:51,590 --> 02:43:49,760

there may be a little bubble in front

4015

02:43:52,070 --> 02:43:51,600

and a bubble in back and you're removing

4016

02:43:55,830 --> 02:43:52,080

and

4017

02:43:58,150 --> 02:43:55,840

to another

4018

02:44:00,790 --> 02:43:58,160

but your ship itself what happens to

4019

02:44:03,990 --> 02:44:00,800

your watch what happens to your age

4020

02:44:05,269 --> 02:44:04,000

did you travel 10 000 light years in the

4021

02:44:08,870 --> 02:44:05,279

warp drive

4022

02:44:11,510 --> 02:44:08,880

without spending the time doing it well

4023

02:44:12,870 --> 02:44:11,520

basically that's the idea but if you're

4024

02:44:14,790 --> 02:44:12,880

going to violate everything that

4025

02:44:16,309 --> 02:44:14,800

einstein laid out there for us what

4026

02:44:18,790 --> 02:44:16,319

happens to your age

4027

02:44:19,910 --> 02:44:18,800

what happens to your family when you get

4028

02:44:23,030 --> 02:44:19,920

back to

4029

02:44:26,150 --> 02:44:23,040

planet earth are they still alive

4030

02:44:28,630 --> 02:44:26,160

or did they die 10 000 years prior

4031

02:44:30,309 --> 02:44:28,640

even though you just spent a day

4032

02:44:33,590 --> 02:44:30,319

traveling in space

4033

02:44:36,710 --> 02:44:33,600

to go to andromeda or someplace else

4034

02:44:39,030 --> 02:44:36,720

these are the questions that i have

4035

02:44:40,790 --> 02:44:39,040

it would answer everything about the tic

4036

02:44:45,349 --> 02:44:40,800

tac it would answer everything about the

4037

02:44:52,070 --> 02:44:48,950

it seems very basic to me it has to

4038

02:44:55,349 --> 02:44:52,080

be simple

4039

02:44:56,469 --> 02:44:55,359

the rocker says jc calculate all you

4040

02:45:00,389 --> 02:44:56,479

desire

4041

02:45:02,469 --> 02:45:00,399

what is the frequency kenneth no

4042

02:45:04,230 --> 02:45:02,479

no one will ever have the answer ever

4043

02:45:13,030 --> 02:45:04,240

time does not exist

4044

02:45:18,790 --> 02:45:16,550

now time definitely exists

4045

02:45:20,870 --> 02:45:18,800

a replicator this is coming in from

4046

02:45:22,630 --> 02:45:20,880

twitter a replicator would should

4047

02:45:24,469 --> 02:45:22,640

sure make getting coffee and cocktails a

4048

02:45:27,590 --> 02:45:24,479

lot easier yeah that's another

4049

02:45:29,510 --> 02:45:27,600

that's another possibility here yeah

4050

02:45:31,190 --> 02:45:29,520

yeah i totally get that oh by the way

4051
02:45:31,510 --> 02:45:31,200
seven four seven two two eight two zero

4052
02:45:34,389 --> 02:45:31,520
five

4053
02:45:35,190 --> 02:45:34,399
one i haven't been paying attention here

4054
02:45:38,230 --> 02:45:35,200
let's uh

4055
02:45:40,630 --> 02:45:38,240
get the uh phone lines active okay

4056
02:45:42,389 --> 02:45:40,640
seven four seven two two eight two zero

4057
02:45:45,750 --> 02:45:42,399
five one i've laid it out

4058
02:45:47,190 --> 02:45:45,760
i mean i these are the thing it has to

4059
02:45:54,870 --> 02:45:47,200
be simple

4060
02:45:58,469 --> 02:45:54,880
and i lay out a concept like uh you know

4061
02:46:01,190 --> 02:45:58,479
how easy it is for you

4062
02:46:02,790 --> 02:46:01,200
to get your news how easy is it for you

4063
02:46:06,150 --> 02:46:02,800

to drive to the store

4064

02:46:06,469 --> 02:46:06,160

how easy is it for you to fly to europe

4065

02:46:08,230 --> 02:46:06,479

or

4066

02:46:10,070 --> 02:46:08,240

to go from europe to the united states

4067

02:46:11,030 --> 02:46:10,080

these are just decisions that we make

4068

02:46:12,870 --> 02:46:11,040

that's all it is

4069

02:46:15,110 --> 02:46:12,880

it's just a decision it's not

4070

02:46:16,870 --> 02:46:15,120

complicated it's a monetary thing can

4071

02:46:18,070 --> 02:46:16,880

you afford to do it yeah okay let's do

4072

02:46:20,389 --> 02:46:18,080

it boom done

4073

02:46:21,670 --> 02:46:20,399

you wake up a couple hours later in

4074

02:46:24,230 --> 02:46:21,680

another country

4075

02:46:25,110 --> 02:46:24,240

halfway around the world these things

4076

02:46:28,469 --> 02:46:25,120

we're talking about

4077

02:46:30,309 --> 02:46:28,479

serious science fiction 150 200 years

4078

02:46:33,670 --> 02:46:30,319

ago

4079

02:46:36,870 --> 02:46:33,680

no way magic absolute magic today

4080

02:46:38,790 --> 02:46:36,880

it's a decision it has to be the same

4081

02:46:42,870 --> 02:46:38,800

way for et

4082

02:46:47,910 --> 02:46:42,880

it has to be just that the um

4083

02:46:51,349 --> 02:46:47,920

the uh the the ideas of the past

4084

02:46:54,550 --> 02:46:51,359

for me don't apply when it comes to et

4085

02:46:56,790 --> 02:46:54,560

and when we look at the fermi paradox

4086

02:46:58,790 --> 02:46:56,800

i don't think it applies and the reason

4087

02:47:02,950 --> 02:46:58,800

why i don't think it applies

4088

02:47:04,950 --> 02:47:02,960

anymore which is um you know

4089

02:47:06,790 --> 02:47:04,960

with the amount of stars and the size of

4090

02:47:07,510 --> 02:47:06,800

the universe and the size of the milky

4091

02:47:09,750 --> 02:47:07,520

way

4092

02:47:10,870 --> 02:47:09,760

there's got to be a lot of intelligent

4093

02:47:14,309 --> 02:47:10,880

life out there so

4094

02:47:16,630 --> 02:47:14,319

where are they where is everything

4095

02:47:17,590 --> 02:47:16,640

we're seeing evidence of that now number

4096

02:47:21,190 --> 02:47:17,600

one

4097

02:47:24,630 --> 02:47:21,200

um and number two

4098

02:47:25,670 --> 02:47:24,640

looking for uh freighters and trade

4099

02:47:28,150 --> 02:47:25,680

routes and

4100

02:47:29,349 --> 02:47:28,160

and things going in between the stars

4101

02:47:33,190 --> 02:47:29,359

it's probably not

4102

02:47:35,510 --> 02:47:33,200

happening we are thinking of giant

4103

02:47:37,349 --> 02:47:35,520

ships and these giant things and leaving

4104

02:47:38,550 --> 02:47:37,359

evidence and traveling at the speed of

4105

02:47:41,429 --> 02:47:38,560

light and we're looking for

4106

02:47:42,950 --> 02:47:41,439

heat waves and he said we're looking for

4107

02:47:45,750 --> 02:47:42,960

things that we understand today

4108

02:47:47,750 --> 02:47:45,760

i just don't think it's that way i don't

4109

02:47:50,389 --> 02:47:47,760

we're talking about

4110

02:47:51,670 --> 02:47:50,399

travel between the stars that happens

4111

02:47:53,910 --> 02:47:51,680

instantaneous

4112

02:47:55,670 --> 02:47:53,920

you're not going to see something we

4113

02:47:57,830 --> 02:47:55,680

have to look at it that way

4114

02:47:58,790 --> 02:47:57,840

that has to be the way that it is let's

4115

02:48:00,230 --> 02:47:58,800

go to the phones

4116

02:48:03,269 --> 02:48:00,240

hi you're live on fade to black who's

4117

02:48:05,269 --> 02:48:03,279

calling hey this is matt from winnipeg

4118

02:48:07,269 --> 02:48:05,279

how's it going buddy hey matt how are

4119

02:48:10,630 --> 02:48:07,279

you man what's on your mind

4120

02:48:12,389 --> 02:48:10,640

oh not bad i was just watching your show

4121

02:48:13,990 --> 02:48:12,399

and there's a few things that we could

4122

02:48:16,469 --> 02:48:14,000

also consider

4123

02:48:19,750 --> 02:48:16,479

what if you know if you said you know

4124

02:48:22,309 --> 02:48:19,760

you take space and you put it behind you

4125

02:48:23,590 --> 02:48:22,319

there is another possibility what if

4126

02:48:26,070 --> 02:48:23,600

you're only putting

4127

02:48:27,269 --> 02:48:26,080

a little bit of space in front of you

4128

02:48:30,309 --> 02:48:27,279

behind you

4129

02:48:33,429 --> 02:48:30,319

at a time you know rather than taking

4130

02:48:34,230 --> 02:48:33,439

huge huge energy leaps from one point to

4131

02:48:37,269 --> 02:48:34,240

another

4132

02:48:40,309 --> 02:48:37,279

what if you did many many little

4133

02:48:43,910 --> 02:48:40,319

jumps from point a to point b

4134

02:48:45,990 --> 02:48:43,920

so you only move to say a foot at a time

4135

02:48:46,790 --> 02:48:46,000

but you moved only a foot at a time by

4136

02:48:50,630 --> 02:48:46,800

putting space

4137

02:48:54,309 --> 02:48:50,640

behind you so that way the less space

4138

02:48:57,190 --> 02:48:54,319

that you would actually move behind you

4139

02:48:59,910 --> 02:48:57,200

then you would consume a considerably

4140

02:49:01,750 --> 02:48:59,920

less energy in order to do so

4141

02:49:02,950 --> 02:49:01,760

and it would take years well yeah yeah

4142

02:49:04,710 --> 02:49:02,960

yeah all of the

4143

02:49:06,230 --> 02:49:04,720

okay i can't wait to hear your next

4144

02:49:08,870 --> 02:49:06,240

point i yeah

4145

02:49:10,469 --> 02:49:08,880

i i i know you're speaking in metaphor

4146

02:49:14,070 --> 02:49:10,479

when you say a foot

4147

02:49:16,150 --> 02:49:14,080

um but yeah much smaller chunks of space

4148

02:49:17,510 --> 02:49:16,160

and uh that would consume a lot less

4149

02:49:19,750 --> 02:49:17,520

energy instead of

4150

02:49:21,510 --> 02:49:19,760

you know throwing two million light

4151
02:49:23,110 --> 02:49:21,520
years of space i don't know how many

4152
02:49:26,469 --> 02:49:23,120
units that is

4153
02:49:27,269 --> 02:49:26,479
uh but uh it's a it's a heck of a lot of

4154
02:49:30,950 --> 02:49:27,279
uh

4155
02:49:32,550 --> 02:49:30,960
distance so breaking that up into chunks

4156
02:49:34,710 --> 02:49:32,560
like data packets

4157
02:49:35,750 --> 02:49:34,720
right you're doing packet switching in

4158
02:49:39,510 --> 02:49:35,760
space

4159
02:49:40,150 --> 02:49:39,520
and uh going from one uh one section to

4160
02:49:42,070 --> 02:49:40,160
the next

4161
02:49:44,389 --> 02:49:42,080
yeah that makes a lot of sense like i

4162
02:49:47,510 --> 02:49:44,399
said it would have to be simple

4163
02:49:51,269 --> 02:49:47,520

i mean so simple so

4164

02:49:55,269 --> 02:49:51,279

fundamentally simple that e.t

4165

02:49:56,950 --> 02:49:55,279

just like we look at driving a car

4166

02:49:59,429 --> 02:49:56,960

i mean how simple is that you get a

4167

02:50:02,790 --> 02:49:59,439

driver's license when you're 16.

4168

02:50:06,230 --> 02:50:02,800

uh anybody can do it right

4169

02:50:07,269 --> 02:50:06,240

there is nothing uh stupefyingly

4170

02:50:09,110 --> 02:50:07,279

difficult with it

4171

02:50:10,710 --> 02:50:09,120

it would be difficult to somebody from

4172

02:50:12,469 --> 02:50:10,720

1700 though

4173

02:50:14,070 --> 02:50:12,479

you know to wrap their mind around that

4174

02:50:16,469 --> 02:50:14,080

concept but

4175

02:50:18,550 --> 02:50:16,479

it is simple and space travel

4176
02:50:21,670 --> 02:50:18,560
interstellar travel would have to be

4177
02:50:22,550 --> 02:50:21,680
the exact same thing for them where it's

4178
02:50:28,550 --> 02:50:22,560
just

4179
02:50:30,469 --> 02:50:28,560
right you know they're also like i said

4180
02:50:32,469 --> 02:50:30,479
there you answer had a

4181
02:50:34,870 --> 02:50:32,479
a listener say that time doesn't

4182
02:50:36,630 --> 02:50:34,880
actually exist

4183
02:50:38,950 --> 02:50:36,640
there there is actually some debate

4184
02:50:41,670 --> 02:50:38,960
about that too you do realize like

4185
02:50:43,030 --> 02:50:41,680
we would have to accept that right now

4186
02:50:43,590 --> 02:50:43,040
in this day and age that we have

4187
02:50:47,190 --> 02:50:43,600
different

4188
02:50:49,830 --> 02:50:47,200

multiple environments uh where we have

4189

02:50:51,510 --> 02:50:49,840

many different decisions that are made

4190

02:50:55,349 --> 02:50:51,520

that are yet to be made

4191

02:50:58,630 --> 02:50:55,359

or have been made and that your decision

4192

02:50:59,750 --> 02:50:58,640

process is really each and every one of

4193

02:51:03,910 --> 02:50:59,760

these steps

4194

02:51:05,670 --> 02:51:03,920

and that really the only barrier between

4195

02:51:06,309 --> 02:51:05,680

these decision processes this is

4196

02:51:08,230 --> 02:51:06,319

actually

4197

02:51:10,389 --> 02:51:08,240

nothing more than just a small

4198

02:51:12,950 --> 02:51:10,399

electromagnetic membrane that we

4199

02:51:15,590 --> 02:51:12,960

kind of puncture from day to day or from

4200

02:51:17,349 --> 02:51:15,600

fraction of a second to second

4201
02:51:19,990 --> 02:51:17,359
you know we look at that with you know

4202
02:51:21,590 --> 02:51:20,000
the d wave quantum computing stuff

4203
02:51:23,349 --> 02:51:21,600
we're starting to look at that through

4204
02:51:24,870 --> 02:51:23,359
phenomenon that we don't really know how

4205
02:51:26,309 --> 02:51:24,880
to explain yet

4206
02:51:27,910 --> 02:51:26,319
and they're coming to a point where we

4207
02:51:30,630 --> 02:51:27,920
have to accept that maybe this

4208
02:51:33,110 --> 02:51:30,640
might actually be what is happening so

4209
02:51:36,710 --> 02:51:33,120
if you look at it with that point

4210
02:51:39,830 --> 02:51:36,720
time and distance are illusions

4211
02:51:41,349 --> 02:51:39,840
and they are a measurement of human

4212
02:51:44,389 --> 02:51:41,359
perception

4213
02:51:46,469 --> 02:51:44,399

so how do we perceive space

4214

02:51:48,790 --> 02:51:46,479

is really nothing more than electrical

4215

02:51:52,550 --> 02:51:48,800

impulses by our brain

4216

02:51:54,950 --> 02:51:52,560

so if we all accept that what we

4217

02:51:56,630 --> 02:51:54,960

see what we taste touch smell and feel

4218

02:51:59,750 --> 02:51:56,640

and hear

4219

02:52:02,790 --> 02:51:59,760

around us is the

4220

02:52:04,309 --> 02:52:02,800

these this electrical nervous system

4221

02:52:07,590 --> 02:52:04,319

impulse

4222

02:52:10,630 --> 02:52:07,600

then we might have to accept the fact

4223

02:52:13,830 --> 02:52:10,640

that the way we look at time and

4224

02:52:17,030 --> 02:52:13,840

distance is different to us

4225

02:52:19,750 --> 02:52:17,040

compared to a more advanced et so

4226
02:52:20,469 --> 02:52:19,760
we might have to accept that time

4227
02:52:21,830 --> 02:52:20,479
doesn't actually

4228
02:52:24,070 --> 02:52:21,840
exist when you look at things like

4229
02:52:27,830 --> 02:52:24,080
entanglement for instance

4230
02:52:30,710 --> 02:52:27,840
um you know where you know where i go

4231
02:52:33,590 --> 02:52:30,720
against the grain on that because i get

4232
02:52:37,190 --> 02:52:33,600
it i i'm totally fascinated with that

4233
02:52:39,750 --> 02:52:37,200
you know uh the concept of time for et

4234
02:52:40,630 --> 02:52:39,760
or an advanced civilization where time

4235
02:52:43,910 --> 02:52:40,640
for them

4236
02:52:45,110 --> 02:52:43,920
is is non-existent the past and the

4237
02:52:48,389 --> 02:52:45,120
future are the same

4238
02:52:50,309 --> 02:52:48,399

as the now and and they don't look

4239

02:52:53,750 --> 02:52:50,319

things in a linear fashion as we do

4240

02:52:57,429 --> 02:52:53,760

except and this is where

4241

02:52:57,990 --> 02:52:57,439

uh time is real time is real when you

4242

02:53:03,190 --> 02:52:58,000

look at

4243

02:53:07,910 --> 02:53:03,200

the pulse of of an energized quartz

4244

02:53:11,030 --> 02:53:07,920

uh the the the the atomic structure

4245

02:53:14,230 --> 02:53:11,040

of molecular particles and

4246

02:53:17,190 --> 02:53:14,240

their pulsing and their rates that

4247

02:53:17,990 --> 02:53:17,200

th these things are a measurement of

4248

02:53:20,630 --> 02:53:18,000

time

4249

02:53:21,830 --> 02:53:20,640

because you can take it one step further

4250

02:53:25,110 --> 02:53:21,840

the cells

4251
02:53:29,510 --> 02:53:25,120
in your body don't

4252
02:53:31,750 --> 02:53:29,520
replicate forever as a matter of fact

4253
02:53:33,910 --> 02:53:31,760
they split they split they split they

4254
02:53:34,870 --> 02:53:33,920
split they split they split they split

4255
02:53:38,150 --> 02:53:34,880
and then

4256
02:53:42,070 --> 02:53:38,160
one day they stop

4257
02:53:43,110 --> 02:53:42,080
because time is saying they can only do

4258
02:53:46,150 --> 02:53:43,120
this

4259
02:53:48,230 --> 02:53:46,160
so many times and then it's over that's

4260
02:53:51,429 --> 02:53:48,240
a measurement of time

4261
02:53:51,750 --> 02:53:51,439
and and our lives are the same type and

4262
02:54:00,710 --> 02:53:51,760
so

4263
02:54:01,750 --> 02:54:00,720

i definitely think that that time is

4264

02:54:05,030 --> 02:54:01,760

real

4265

02:54:06,550 --> 02:54:05,040

and going backwards or or or

4266

02:54:08,309 --> 02:54:06,560

forwards you know traveling to the

4267

02:54:09,670 --> 02:54:08,319

future or to the past that's another

4268

02:54:12,710 --> 02:54:09,680

thing all together

4269

02:54:13,750 --> 02:54:12,720

but time in a linear sense because right

4270

02:54:16,790 --> 02:54:13,760

now matt

4271

02:54:17,830 --> 02:54:16,800

as you and i are talking the past just

4272

02:54:21,910 --> 02:54:17,840

happened

4273

02:54:25,349 --> 02:54:21,920

you can't go back to your conversation

4274

02:54:29,830 --> 02:54:25,359

therefore time is real you can't

4275

02:54:32,870 --> 02:54:29,840

go back and repeat what we just did

4276

02:54:36,070 --> 02:54:32,880

by by the second right

4277

02:54:37,830 --> 02:54:36,080

we're always going in in one direction

4278

02:54:39,750 --> 02:54:37,840

yeah we're going into the future so

4279

02:54:42,950 --> 02:54:39,760

therefore i think time is

4280

02:54:44,309 --> 02:54:42,960

is completely measurable and linear down

4281

02:54:47,429 --> 02:54:44,319

to the atomic level

4282

02:54:48,150 --> 02:54:47,439

and and the amount that cells in your

4283

02:54:51,349 --> 02:54:48,160

body or

4284

02:54:54,790 --> 02:54:51,359

frog or or a shark

4285

02:54:56,550 --> 02:54:54,800

or anything is limited to how many times

4286

02:54:59,269 --> 02:54:56,560

they replicate and they split

4287

02:55:00,389 --> 02:54:59,279

and then one day they stop what you

4288

02:55:03,510 --> 02:55:00,399

described there was

4289

02:55:04,950 --> 02:55:03,520

entropy so like you said when you your

4290

02:55:05,670 --> 02:55:04,960

cells grow and grow and grow and

4291

02:55:08,230 --> 02:55:05,680

eventually

4292

02:55:10,790 --> 02:55:08,240

they die out and it just kind of stops

4293

02:55:13,510 --> 02:55:10,800

yeah what you're describing is entropy

4294

02:55:14,230 --> 02:55:13,520

it's a form of it yeah i i suppose so

4295

02:55:16,630 --> 02:55:14,240

yeah

4296

02:55:18,710 --> 02:55:16,640

so what you might have to consider is

4297

02:55:21,349 --> 02:55:18,720

that like what you just said there too

4298

02:55:22,950 --> 02:55:21,359

when you look at cells and they they

4299

02:55:27,269 --> 02:55:22,960

break down and and they

4300

02:55:31,830 --> 02:55:27,279

die or when you see a pulse

4301

02:55:34,630 --> 02:55:31,840

uh process um at a specific rate

4302

02:55:35,190 --> 02:55:34,640

and what what were the key words here

4303

02:55:38,630 --> 02:55:35,200

how

4304

02:55:42,230 --> 02:55:38,640

you as the observer look

4305

02:55:45,510 --> 02:55:42,240

at these particular phenomena so

4306

02:55:45,830 --> 02:55:45,520

when you look at these phenomena or when

4307

02:55:49,830 --> 02:55:45,840

you

4308

02:55:52,950 --> 02:55:49,840

happening with cells

4309

02:55:56,230 --> 02:55:52,960

or your environment what are you doing

4310

02:55:59,030 --> 02:55:56,240

you are observing human perception

4311

02:55:59,429 --> 02:55:59,040

until you start to look at the concepts

4312

02:56:02,870 --> 02:55:59,439

of an

4313

02:56:06,150 --> 02:56:02,880

et that perhaps they figured out

4314

02:56:07,110 --> 02:56:06,160

how to look at entropy differently or

4315

02:56:10,830 --> 02:56:07,120

manipulate

4316

02:56:13,830 --> 02:56:10,840

entropy differently in our

4317

02:56:16,870 --> 02:56:13,840

environment and like i said

4318

02:56:19,670 --> 02:56:16,880

how you are perceiving time is

4319

02:56:22,230 --> 02:56:19,680

electrical impulses by your brain

4320

02:56:25,030 --> 02:56:22,240

without these electrical impulses

4321

02:56:26,070 --> 02:56:25,040

then how do we look at time uh in a

4322

02:56:29,190 --> 02:56:26,080

linear sense

4323

02:56:29,990 --> 02:56:29,200

we have to accept that time may we can

4324

02:56:32,950 --> 02:56:30,000

be observed

4325

02:56:33,670 --> 02:56:32,960

linearly or non-linearly all in the same

4326

02:56:35,830 --> 02:56:33,680

moment

4327

02:56:36,870 --> 02:56:35,840

if that makes any sense no well of

4328

02:56:39,990 --> 02:56:36,880

course it does

4329

02:56:44,070 --> 02:56:40,000

and and i think that that is the case

4330

02:56:46,790 --> 02:56:44,080

um the perception of time uh between

4331

02:56:47,590 --> 02:56:46,800

uh two individuals given the the the

4332

02:56:50,950 --> 02:56:47,600

situation

4333

02:56:54,070 --> 02:56:50,960

is completely different right if

4334

02:56:57,030 --> 02:56:54,080

you and i are sitting in in uh

4335

02:56:57,830 --> 02:56:57,040

in the same room you're reading a book

4336

02:56:59,910 --> 02:56:57,840

and i don't

4337

02:57:01,110 --> 02:56:59,920

have a book and we have to sit there for

4338

02:57:03,429 --> 02:57:01,120

an hour

4339

02:57:05,110 --> 02:57:03,439

and then somebody comes in and says okay

4340

02:57:06,309 --> 02:57:05,120

how long were you just sitting in here

4341

02:57:08,150 --> 02:57:06,319

and i'm gonna go dude man i was gonna

4342

02:57:10,790 --> 02:57:08,160

seem like three hours to me

4343

02:57:12,870 --> 02:57:10,800

and you're and you say 20 minutes

4344

02:57:15,830 --> 02:57:12,880

because it flew by

4345

02:57:16,950 --> 02:57:15,840

that's it but it's the same hour you

4346

02:57:19,510 --> 02:57:16,960

know and that's

4347

02:57:20,230 --> 02:57:19,520

that thing as fundamental and as as

4348

02:57:23,510 --> 02:57:20,240

simple as

4349

02:57:26,230 --> 02:57:23,520

of a statement as that is that is

4350

02:57:27,110 --> 02:57:26,240

the perception of time and it's it's

4351
02:57:29,990 --> 02:57:27,120
it's different for

4352
02:57:30,950 --> 02:57:30,000
for everybody at any given moment every

4353
02:57:34,630 --> 02:57:30,960
living thing

4354
02:57:39,110 --> 02:57:38,389
right so if everybody lit experiences

4355
02:57:42,309 --> 02:57:39,120
time

4356
02:57:45,830 --> 02:57:42,319
differently then we have to accept that

4357
02:57:49,110 --> 02:57:45,840
time itself might be an illusion

4358
02:57:52,710 --> 02:57:49,120
itself i'm not saying that time

4359
02:57:56,070 --> 02:57:52,720
does or doesn't exist and since

4360
02:57:59,670 --> 02:57:56,080
but if we have to look at things like

4361
02:58:02,389 --> 02:57:59,680
entanglement for instance where we can

4362
02:58:04,950 --> 02:58:02,399
split a particle of light in half

4363
02:58:05,910 --> 02:58:04,960

and we can move that particle on one

4364

02:58:09,030 --> 02:58:05,920

side of uh

4365

02:58:11,830 --> 02:58:09,040

say 12 feet away from us

4366

02:58:14,070 --> 02:58:11,840

and uh and look at the other particle

4367

02:58:17,429 --> 02:58:14,080

another 12 feet away from us

4368

02:58:19,910 --> 02:58:17,439

and yet they jostle at the same rate

4369

02:58:20,710 --> 02:58:19,920

without any kind of lag time between

4370

02:58:23,429 --> 02:58:20,720

that

4371

02:58:24,230 --> 02:58:23,439

which i believe mit has already proved

4372

02:58:29,190 --> 02:58:24,240

that

4373

02:58:32,150 --> 02:58:29,200

time itself

4374

02:58:32,790 --> 02:58:32,160

it maybe exists in two different forms

4375

02:58:43,110 --> 02:58:32,800

linear

4376
02:58:44,950 --> 02:58:43,120
yeah so yeah you're right about that and

4377
02:58:46,950 --> 02:58:44,960
the chinese have done

4378
02:58:48,150 --> 02:58:46,960
uh there's two experiments that have

4379
02:58:51,990 --> 02:58:48,160
been fantastic one

4380
02:58:54,630 --> 02:58:52,000
uh going out uh uh to a star

4381
02:58:55,190 --> 02:58:54,640
and measuring entanglement but also the

4382
02:58:57,269 --> 02:58:55,200
uh

4383
02:58:59,190 --> 02:58:57,279
the satellites that the chinese have

4384
02:59:03,590 --> 02:58:59,200
been entangling with

4385
02:59:05,110 --> 02:59:03,600
and and proven but when you get to be 80

4386
02:59:06,630 --> 02:59:05,120
years old

4387
02:59:08,469 --> 02:59:06,640
and you're questioning your own

4388
02:59:11,190 --> 02:59:08,479

mortality

4389

02:59:15,110 --> 02:59:11,200

at that point and your life lived you

4390

02:59:17,030 --> 02:59:15,120

tell me if time is real or not

4391

02:59:18,309 --> 02:59:17,040

and with that matt enjoy the rest of

4392

02:59:19,429 --> 02:59:18,319

your night man we'll see you tomorrow

4393

02:59:21,750 --> 02:59:19,439

night

4394

02:59:22,550 --> 02:59:21,760

all right see you tomorrow go back leech

4395

02:59:24,469 --> 02:59:22,560

happy buddy

4396

02:59:25,830 --> 02:59:24,479

go beckley teppy great phone call thank

4397

02:59:27,830 --> 02:59:25,840

you so much matt

4398

02:59:29,750 --> 02:59:27,840

and with that i got to get out of here

4399

02:59:31,830 --> 02:59:29,760

and i've got calls on hold i'm

4400

02:59:33,269 --> 02:59:31,840

you know i i just didn't get to them

4401

02:59:35,190 --> 02:59:33,279

i'll you know

4402

02:59:36,950 --> 02:59:35,200

i'll talk to everybody tomorrow night

4403

02:59:37,990 --> 02:59:36,960

what a great show got to thank deep

4404

02:59:41,110 --> 02:59:38,000

prasad

4405

02:59:43,910 --> 02:59:41,120

fantastic conversation and

4406

02:59:44,469 --> 02:59:43,920

uh i just gotta say what a start to the

4407

02:59:46,389 --> 02:59:44,479

week

4408

02:59:47,990 --> 02:59:46,399

tomorrow night jay widener wednesday

4409

02:59:51,429 --> 02:59:48,000

night carolyn

4410

02:59:53,830 --> 02:59:51,439

ford all right aye faded black's

4411

02:59:55,990 --> 02:59:53,840

executive producers rita kamarian

4412

02:59:57,750 --> 02:59:56,000

shows produced by hilton j paul renee

4413

02:59:58,630 --> 02:59:57,760

dennis and kevin announcers are steve

4414

03:00:00,950 --> 02:59:58,640

harder

4415

03:00:03,269 --> 03:00:00,960

gene vitoa mark d kovar webmaster is

4416

03:00:08,150 --> 03:00:03,279

drew the geek music doug aldrige

4417

03:00:10,150 --> 03:00:08,160

intro space boy spaceboymusic.com

4418

03:00:12,070 --> 03:00:10,160

fade to black is produced by kjcr for

4419

03:00:13,910 --> 03:00:12,080

the game changer network and syndication

4420

03:00:15,910 --> 03:00:13,920

is kgra

4421

03:00:18,150 --> 03:00:15,920

the planet broadcast zone and

4422

03:00:19,750 --> 03:00:18,160

copyrighted 2020 by fade to black in the

4423

03:00:21,750 --> 03:00:19,760

game changer network inc

4424

03:00:23,030 --> 03:00:21,760

they cannot be re-broadcast downloaded

4425

03:00:25,110 --> 03:00:23,040

copied

4426

03:00:26,870 --> 03:00:25,120

or used anywhere in the known universe

4427

03:00:28,469 --> 03:00:26,880

without written permission from fade to

4428

03:00:29,670 --> 03:00:28,479

black with the game changer network i'm

4429

03:00:32,469 --> 03:00:29,680

your host jimmy church

4430

03:00:33,269 --> 03:00:32,479

tomorrow night right here jay widener

4431

03:00:41,220 --> 03:00:33,279

until then

4432

03:01:18,830 --> 03:00:41,390

[Applause]