



1
00:00:48,780 --> 00:00:45,260

[Music]

2
00:00:55,920 --> 00:00:51,220
everybody's out for the mental guard on

3
00:01:01,750 --> 00:00:59,200
this is kera digital broadcasting

4
00:01:04,990 --> 00:01:01,760
station Salt Lake City Utah

5
00:01:06,700 --> 00:01:05,000
Van Buren Arkansas poor water quality is

6
00:01:07,719 --> 00:01:06,710
a major health issue and it's only

7
00:01:09,940 --> 00:01:07,729
getting worse

8
00:01:11,410 --> 00:01:09,950
municipalities can't keep up standards

9
00:01:14,560 --> 00:01:11,420
have dropped and pollutants are

10
00:01:16,359 --> 00:01:14,570
increasing where does it all end it ends

11
00:01:18,100 --> 00:01:16,369
by keeping the pollutants outside of

12
00:01:20,170 --> 00:01:18,110
your home with hydro cares advanced

13
00:01:22,570 --> 00:01:20,180

systems available at wave home solutions

14

00:01:24,040 --> 00:01:22,580

no less than the best purification

15

00:01:26,109 --> 00:01:24,050

materials and processes have been

16

00:01:27,550 --> 00:01:26,119

developed by Hydra care to provide you

17

00:01:30,460 --> 00:01:27,560

with healthy clean water for drinking

18

00:01:32,410 --> 00:01:30,470

cooking and showering hydro care far

19

00:01:35,499 --> 00:01:32,420

surpasses the competition in removing

20

00:01:38,469 --> 00:01:35,509

chlorine odors iron lab chemicals

21

00:01:40,480 --> 00:01:38,479

limescale and much more don't settle for

22

00:01:42,340 --> 00:01:40,490

less when it comes to your water we'll

23

00:01:44,410 --> 00:01:42,350

take care of the toughest water problems

24

00:01:47,139 --> 00:01:44,420

for you whether it's from a city or well

25

00:01:49,029 --> 00:01:47,149

source satisfaction guaranteed for more

26

00:01:51,070 --> 00:01:49,039

information call eight eight eight nine

27

00:01:54,460 --> 00:01:51,080

nine seven wave that's eight eight eight

28

00:01:56,740 --> 00:01:54,470

nine nine seven w AV e or go to best

29

00:02:00,480 --> 00:01:56,750

water one two three dot-com that's best

30

00:02:06,340 --> 00:02:03,570

[Music]

31

00:02:10,780 --> 00:02:06,350

your contact for current news and

32

00:02:12,580 --> 00:02:10,790

trending topics je GRA radio.com does

33

00:02:14,950 --> 00:02:12,590

your basement or crawlspace have a damp

34

00:02:16,720 --> 00:02:14,960

musty smell well watch out that's a sign

35

00:02:18,550 --> 00:02:16,730

of too much moisture and not enough

36

00:02:20,500 --> 00:02:18,560

ventilation and that can mean increased

37

00:02:22,450 --> 00:02:20,510

mold growth and the build-up of harmful

38

00:02:24,700 --> 00:02:22,460

toxins and gases don't bother with a

39

00:02:27,010 --> 00:02:24,710

dehumidifier it just circulates the same

40

00:02:29,260 --> 00:02:27,020

unhealthy air now there's a better way

41

00:02:31,240 --> 00:02:29,270

to remove these dangers and odors it's

42

00:02:33,370 --> 00:02:31,250

with the computerized wave moisture

43

00:02:35,440 --> 00:02:33,380

control unit that reduces moisture and

44

00:02:37,450 --> 00:02:35,450

expels pollutants we replaced our old

45

00:02:39,730 --> 00:02:37,460

dehumidifier with the wave unit and in

46

00:02:41,470 --> 00:02:39,740

only three weeks our basement is dry and

47

00:02:43,480 --> 00:02:41,480

the musty smell is gone

48

00:02:45,880 --> 00:02:43,490

wave units require no maintenance no

49

00:02:48,010 --> 00:02:45,890

buckets of water or filters and costs

50

00:02:50,230 --> 00:02:48,020

only pennies a day to run breathe better

51
00:02:52,630 --> 00:02:50,240
live healthier with an affordable no

52
00:02:55,000 --> 00:02:52,640
maintenance wave unit call eight eight

53
00:02:59,770 --> 00:02:55,010
eight seven one seven way eight eight

54
00:03:04,780 --> 00:03:03,250
dry healthy home calm

55
00:03:06,940 --> 00:03:04,790
[Music]

56
00:03:10,420 --> 00:03:06,950
phone solutions

57
00:03:16,160 --> 00:03:12,860
this is Jimmy Church a fade to black

58
00:03:19,580 --> 00:03:16,170
and I only drink fade to black blend

59
00:03:21,740 --> 00:03:19,590
coffee from River moon just click on the

60
00:03:26,630 --> 00:03:21,750
River moon coffee banner at Jimmy Church

61
00:03:29,059 --> 00:03:26,640
radio.com promo code f2b blend so are

62
00:03:31,940 --> 00:03:29,069
you tired of being tired well then it's

63
00:03:33,740 --> 00:03:31,950

time to get the tea hey it's Lisa here

64

00:03:36,229 --> 00:03:33,750

to tell you about this all-natural all

65

00:03:38,210 --> 00:03:36,239

organic tea I've been drinking that has

66

00:03:41,119 --> 00:03:38,220

had great results for over 20 years

67

00:03:42,949 --> 00:03:41,129

it's called life change tea and it's

68

00:03:45,559 --> 00:03:42,959

specially formulated to help detoxify

69

00:03:48,289 --> 00:03:45,569

and cleanse your kidneys liver colon and

70

00:03:49,670 --> 00:03:48,299

blood all at once the colon is one of

71

00:03:52,430 --> 00:03:49,680

the most ignored organs in the human

72

00:03:54,259 --> 00:03:52,440

body the faster that waste is eliminated

73

00:03:56,240 --> 00:03:54,269

from the body the less time that way

74

00:03:58,160 --> 00:03:56,250

sits in our intestines spreading toxins

75

00:04:00,110 --> 00:03:58,170

to our bloodstream this tea helps

76

00:04:02,000 --> 00:04:00,120

cleanse chemicals caused by outside

77

00:04:05,059 --> 00:04:02,010

intruders from our entire digestive

78

00:04:07,369 --> 00:04:05,069

system and get this weight loss can be a

79

00:04:09,589 --> 00:04:07,379

side effect and with continued use of

80

00:04:12,020 --> 00:04:09,599

the tea you can experience clearer

81

00:04:14,689 --> 00:04:12,030

healthier younger looking skin increased

82

00:04:16,069 --> 00:04:14,699

energy and a happier outlook on life so

83

00:04:18,979 --> 00:04:16,079

if you're tired of being tired

84

00:04:22,850 --> 00:04:18,989

get the life changed tea at get the tea

85

00:04:25,790 --> 00:04:22,860

calm that's get the tea calm and like me

86

00:04:27,529 --> 00:04:25,800

you'll be glad you did did you know that

87

00:04:29,810 --> 00:04:27,539

when you're on the road with limited

88

00:04:31,730 --> 00:04:29,820

data or Wi-Fi available you can still

89

00:04:34,490 --> 00:04:31,740

listen to every minute of fade to black

90

00:04:37,610 --> 00:04:34,500

by just calling six oh five five six two

91

00:04:39,920 --> 00:04:37,620

four four eight two no smartphone app or

92

00:04:42,170 --> 00:04:39,930

Internet needed it saves your data plan

93

00:04:45,500 --> 00:04:42,180

and no extra cost if you have unlimited

94

00:04:47,839 --> 00:04:45,510

minutes just call six oh five five six

95

00:04:50,270 --> 00:04:47,849

two four four eight two you can listen

96

00:04:58,150 --> 00:04:50,280

to me Jimmy Church on any phone anytime

97

00:05:02,170 --> 00:04:59,850

[Music]

98

00:05:06,920 --> 00:05:02,180

[Applause]

99

00:05:09,549 --> 00:05:06,930

you wanna know a secret I love ponies I

100

00:05:12,170 --> 00:05:09,559

really love ponies I'm serious I

101
00:05:16,070 --> 00:05:12,180
couldn't stay stable without poor mr.

102
00:05:21,300 --> 00:05:16,080
Brooks why fade to black because you

103
00:05:25,300 --> 00:05:23,380
this is fade to black

104
00:05:28,990 --> 00:05:25,310
with Jimmy Church on the game changer

105
00:05:31,360 --> 00:05:29,000
radio network and K GRA the global radio

106
00:05:43,750 --> 00:05:31,370
alliance

107
00:05:46,400 --> 00:05:43,760
[Music]

108
00:05:51,260 --> 00:05:46,410
all right welcome back fade to black I'm

109
00:05:56,300 --> 00:05:51,270
your host of you church gremlins our

110
00:06:00,500 --> 00:05:56,310
guest tonight Isaac Arthur discussing

111
00:06:03,260 --> 00:06:00,510
the Fermi paradox and there you go see

112
00:06:06,170 --> 00:06:03,270
Isaac right there that is an example of

113
00:06:10,100 --> 00:06:06,180

sometimes they don't want us to

114

00:06:11,540 --> 00:06:10,110

communicate it's a great example of why

115

00:06:14,000 --> 00:06:11,550

it is a good idea to keep you a more

116

00:06:15,910 --> 00:06:14,010

basic technology around like radio if

117

00:06:19,790 --> 00:06:15,920

you got all the more advanced stuff

118

00:06:23,330 --> 00:06:19,800

totally 100% keep the analog version

119

00:06:27,410 --> 00:06:23,340

whatever it is that you are doing still

120

00:06:29,420 --> 00:06:27,420

you know everybody wants the USB hookup

121

00:06:32,510 --> 00:06:29,430

in their car now right you can barely

122

00:06:33,110 --> 00:06:32,520

buy a radio in the car I that's a bad

123

00:06:36,920 --> 00:06:33,120

idea

124

00:06:38,960 --> 00:06:36,930

I really had options not subtract yeah

125

00:06:40,940 --> 00:06:38,970

you know when when when we were all

126

00:06:43,310 --> 00:06:40,950

growing up you remember the stereo

127

00:06:45,710 --> 00:06:43,320

stores at the mall right and and you

128

00:06:47,600 --> 00:06:45,720

would have these ginormous speakers and

129

00:06:50,930 --> 00:06:47,610

you know your cassette deck and your

130

00:06:53,900 --> 00:06:50,940

equalizer and your have nobody has

131

00:06:56,480 --> 00:06:53,910

radios in their house anymore I still I

132

00:06:58,280 --> 00:06:56,490

got a few but we lose the power where

133

00:07:01,640 --> 00:06:58,290

I'm at pretty regularly so it pays to

134

00:07:04,820 --> 00:07:01,650

have a radio with batteries I don't I I

135

00:07:07,760 --> 00:07:04,830

don't think we have one over oh you know

136

00:07:11,300 --> 00:07:07,770

what I've got an emergency radio in my

137

00:07:13,790 --> 00:07:11,310

bug-out kit right with the crank up yeah

138

00:07:15,350 --> 00:07:13,800

that that I do have those yeah well your

139

00:07:16,400 --> 00:07:15,360

batteries lying around but it's nice to

140

00:07:18,560 --> 00:07:16,410

have something you can actually hand

141

00:07:20,960 --> 00:07:18,570

crank so low is handy but not at night

142

00:07:24,770 --> 00:07:20,970

time so yeah I've got all of that I've

143

00:07:27,230 --> 00:07:24,780

got I've got lanterns that you crank up

144

00:07:30,560 --> 00:07:27,240

that actually have USB chargers on them

145

00:07:32,960 --> 00:07:30,570

I do I really do I've got I've got a

146

00:07:34,580 --> 00:07:32,970

survival kit the more these kind of

147

00:07:36,350 --> 00:07:34,590

things you have on hand if nothing else

148

00:07:38,030 --> 00:07:36,360

they give you a lot of peace of mind and

149

00:07:40,490 --> 00:07:38,040

if you in some kind of civilization that

150

00:07:42,080 --> 00:07:40,500

where you've got a lot of prosperity you

151
00:07:43,850 --> 00:07:42,090
can do a lot of preparing walk you know

152
00:07:46,310 --> 00:07:43,860
against catastrophes if for no better

153
00:07:47,270 --> 00:07:46,320
reason that peace of mind so tends to be

154
00:07:48,620 --> 00:07:47,280
one of those reasons why I think they'd

155
00:07:49,420 --> 00:07:48,630
have a lot of your wood stuff lying

156
00:07:51,999 --> 00:07:49,430
around

157
00:07:55,300 --> 00:07:52,009
let's uh let's continue here and now

158
00:07:56,890 --> 00:07:55,310
that we're obviously gonna go into some

159
00:07:59,050 --> 00:07:56,900
overtime tonight so we can get the rest

160
00:08:03,460 --> 00:07:59,060
of this in I want to complete these

161
00:08:07,499 --> 00:08:03,470
thoughts and one of okay so the question

162
00:08:13,060 --> 00:08:07,509
is where is ET right where are they and

163
00:08:18,070 --> 00:08:13,070

when you come to this next answer again

164

00:08:23,170 --> 00:08:18,080

it gets deliberately what's the word I

165

00:08:26,950 --> 00:08:23,180

want to say complex because maybe just

166

00:08:32,860 --> 00:08:26,960

maybe earth is not contacted that they

167

00:08:34,570 --> 00:08:32,870

are not they are avoiding us when we get

168

00:08:35,949 --> 00:08:34,580

to those ones and this is kind of a zoo

169

00:08:37,630 --> 00:08:35,959

hypothesis well in this case this

170

00:08:38,890 --> 00:08:37,640

wouldn't be a zoo hypothesis assumes

171

00:08:41,019 --> 00:08:38,900

they're not really avoiding us they're

172

00:08:42,279 --> 00:08:41,029

watching us the version where they avoid

173

00:08:44,710 --> 00:08:42,289

us will be sometimes called the

174

00:08:46,449 --> 00:08:44,720

quarantine option is where for some

175

00:08:48,790 --> 00:08:46,459

reason they want to stay away from us

176

00:08:51,870 --> 00:08:48,800

and usually specifically ortho I might

177

00:08:53,980 --> 00:08:51,880

just be any primitive civilization I

178

00:08:55,570 --> 00:08:53,990

can't think of anything that earth would

179

00:08:57,519 --> 00:08:55,580

have going for it that they'd want to

180

00:08:59,740 --> 00:08:57,529

specifically avoid there often we'll see

181

00:09:02,410 --> 00:08:59,750

the films I say well humans are so

182

00:09:04,420 --> 00:09:02,420

aggressive and hostile I say well maybe

183

00:09:06,280 --> 00:09:04,430

these aliens are a lot more peaceful but

184

00:09:08,560 --> 00:09:06,290

they probably came up the ladder the

185

00:09:10,900 --> 00:09:08,570

same way we did and you know the

186

00:09:13,960 --> 00:09:10,910

evolutions are four billion year deep

187

00:09:16,060 --> 00:09:13,970

corpse pile he tend to be aggressive to

188

00:09:17,829 --> 00:09:16,070

survives right right I can't think of

189

00:09:21,130 --> 00:09:17,839

any reason why they would want to avoid

190

00:09:23,320 --> 00:09:21,140

us out of feel for themselves so that

191

00:09:26,560 --> 00:09:23,330

one has the problem that it doesn't

192

00:09:28,960 --> 00:09:26,570

really fit well this is different

193

00:09:31,860 --> 00:09:28,970

let's scratch that off the list then but

194

00:09:35,530 --> 00:09:31,870

what would the other reasons be for not

195

00:09:37,390 --> 00:09:35,540

they may not be negative reasons mm-hmm

196

00:09:39,070 --> 00:09:37,400

they don't necessarily negative reasons

197

00:09:41,380 --> 00:09:39,080

I mean their fear that they're going to

198

00:09:42,760 --> 00:09:41,390

contaminate all quarters and therefore

199

00:09:44,500 --> 00:09:42,770

so that is an option to where it might

200

00:09:46,900 --> 00:09:44,510

be more widespread that alien

201
00:09:48,340 --> 00:09:46,910
civilizations don't want to go to war

202
00:09:49,930 --> 00:09:48,350
with each other they're not hostile but

203
00:09:51,670 --> 00:09:49,940
they always leave big buffer zones and

204
00:09:53,650 --> 00:09:51,680
don't communicate much because they've

205
00:09:54,160 --> 00:09:53,660
found that you know no matter how you

206
00:09:55,600 --> 00:09:54,170
cut it

207
00:09:58,150 --> 00:09:55,610
they've got cultural differences that

208
00:10:00,550 --> 00:09:58,160
they just can't get along with you're

209
00:10:03,160 --> 00:10:00,560
close to each other we often say that

210
00:10:05,650 --> 00:10:03,170
begin to know people we we loaned on

211
00:10:07,710 --> 00:10:05,660
stand them often we don't understand

212
00:10:09,850 --> 00:10:07,720
them we still don't get along very well

213
00:10:12,430 --> 00:10:09,860

we have the example with a Babel Fish

214

00:10:13,569 --> 00:10:12,440

from Dulles Adams they says by having

215

00:10:15,759 --> 00:10:13,579

allowed everyone to speak each other's

216

00:10:18,129 --> 00:10:15,769

language it's caused more blood your

217

00:10:19,389 --> 00:10:18,139

wars than anything in history right if

218

00:10:22,210 --> 00:10:19,399

you've got an alien species that

219

00:10:24,370 --> 00:10:22,220

produces as fast as dogs or cats do it

220

00:10:26,650 --> 00:10:24,380

has littles they might have adopted very

221

00:10:28,829 --> 00:10:26,660

early on a control of population where

222

00:10:31,150 --> 00:10:28,839

they kill off 90 percent of their kids

223

00:10:33,730 --> 00:10:31,160

that aren't quite up to snuff and only

224

00:10:35,530 --> 00:10:33,740

keep the best 10% there was no way we

225

00:10:36,850 --> 00:10:35,540

were ever gonna really allow them we

226

00:10:38,680 --> 00:10:36,860

don't want to go to war with them but we

227

00:10:40,210 --> 00:10:38,690

don't want to touch them and we also

228

00:10:42,699 --> 00:10:40,220

don't want them and they don't want us

229

00:10:45,430 --> 00:10:42,709

poisoning new civilizations against them

230

00:10:47,439 --> 00:10:45,440

so there might be a kind of loose rule

231

00:10:49,449 --> 00:10:47,449

that you only expand out so far and you

232

00:10:52,180 --> 00:10:49,459

keep pretty quiet you're not hiding you

233

00:10:54,400 --> 00:10:52,190

just don't actively court conversations

234

00:10:57,129 --> 00:10:54,410

with those civilizations and that one's

235

00:10:58,300 --> 00:10:57,139

a viable lish for me paradox just

236

00:11:00,300 --> 00:10:58,310

because it means if people don't expand

237

00:11:04,180 --> 00:11:00,310

or talk much we might have missed them

238

00:11:05,949 --> 00:11:04,190

so far that one though still pretty iffy

239

00:11:08,470 --> 00:11:05,959

it requires a lot of assumptions about

240

00:11:10,540 --> 00:11:08,480

how these civilizations would look to us

241

00:11:14,610 --> 00:11:10,550

for you're looking for them and what

242

00:11:19,360 --> 00:11:14,620

about ok now this is the the church

243

00:11:24,519 --> 00:11:19,370

hypothesis on this one maybe we're

244

00:11:26,710 --> 00:11:24,529

boring maybe maybe there's more except

245

00:11:28,870 --> 00:11:26,720

they know about us they visited us

246

00:11:32,370 --> 00:11:28,880

they've checked us out but there are

247

00:11:34,930 --> 00:11:32,380

just cooler versions of earth to go to

248

00:11:37,120 --> 00:11:34,940

it's the Kansas of the Galant that's

249

00:11:40,000 --> 00:11:37,130

right I'm not trying to offend anybody

250

00:11:43,449 --> 00:11:40,010

in Kansas but Vegas is a lot more

251
00:11:46,329 --> 00:11:43,459
exciting right and so maybe they want to

252
00:11:48,610 --> 00:11:46,339
go to Planet Vegas and that makes so

253
00:11:51,189 --> 00:11:48,620
much sense except for one problem they

254
00:11:55,269 --> 00:11:51,199
get millions of visitors to Kansas every

255
00:11:57,160 --> 00:11:55,279
year you find your boy in place and

256
00:11:59,170 --> 00:11:57,170
someone's gonna come by and visit you

257
00:12:00,430 --> 00:11:59,180
know even if just to be like why does

258
00:12:01,840 --> 00:12:00,440
nobody visit this place I need to go

259
00:12:04,319 --> 00:12:01,850
write up an article on this or there'll

260
00:12:07,180 --> 00:12:04,329
be someone saying hey this place gets no

261
00:12:09,280 --> 00:12:07,190
tourism it's a live target

262
00:12:10,720 --> 00:12:09,290
I'll go they all talk to them and get

263
00:12:12,699 --> 00:12:10,730

their tourist industry boom you know

264

00:12:16,240 --> 00:12:12,709

make a billion you know Sun tallien

265

00:12:17,200 --> 00:12:16,250

bucks by getting us tourism industry

266

00:12:18,700 --> 00:12:17,210

going

267

00:12:20,980 --> 00:12:18,710

you know someone's gonna come by to

268

00:12:23,500 --> 00:12:20,990

visit for some reason it doesn't matter

269

00:12:28,900 --> 00:12:23,510

how boy the place is they're gonna have

270

00:12:30,880 --> 00:12:28,910

stopped by well and I yes you see you

271

00:12:33,280 --> 00:12:30,890

lay it out pretty pretty well but I just

272

00:12:36,220 --> 00:12:33,290

disagree with that and the only reason

273

00:12:39,370 --> 00:12:36,230

why I disagree with it it comes down to

274

00:12:41,740 --> 00:12:39,380

math that I know that there has to be

275

00:12:44,950 --> 00:12:41,750

it's simple math there has to be

276

00:12:47,740 --> 00:12:44,960

millions if not billions of versions of

277

00:12:51,600 --> 00:12:47,750

Earth out there in this galaxy right

278

00:12:54,490 --> 00:12:51,610

water everything plants nice beaches

279

00:12:57,160 --> 00:12:54,500

great place to hang out but then there

280

00:13:00,430 --> 00:12:57,170

are billions of versions of Earth out

281

00:13:02,260 --> 00:13:00,440

there that are fun a little bit bigger

282

00:13:04,720 --> 00:13:02,270

the temperatures are a little bit better

283

00:13:09,070 --> 00:13:04,730

there's less earthquakes and there's

284

00:13:10,870 --> 00:13:09,080

things and the great casinos and and the

285

00:13:14,500 --> 00:13:10,880

food is just a little bit better you

286

00:13:17,410 --> 00:13:14,510

know I'm just saying that maybe that is

287

00:13:20,680 --> 00:13:17,420

the case where we are just we're just

288

00:13:22,330 --> 00:13:20,690

boring there is no action here yeah that

289

00:13:23,950 --> 00:13:22,340

is a real possibility for why we

290

00:13:25,570 --> 00:13:23,960

wouldn't get much traffic but it doesn't

291

00:13:26,890 --> 00:13:25,580

you know the bigger the population the

292

00:13:28,810 --> 00:13:26,900

galaxy gets and we start talking about

293

00:13:32,140 --> 00:13:28,820

galactic empires we're talking about

294

00:13:33,790 --> 00:13:32,150

billions upon billions of potential

295

00:13:36,550 --> 00:13:33,800

wards and habitats they might have built

296

00:13:39,130 --> 00:13:36,560

with billions upon billions upon

297

00:13:41,440 --> 00:13:39,140

billions of people mm-hmm there's just

298

00:13:43,690 --> 00:13:41,450

however boy north is there's gonna be a

299

00:13:44,620 --> 00:13:43,700

few people who think it's the coolest

300

00:13:46,480 --> 00:13:44,630

place ever

301

00:13:47,350 --> 00:13:46,490

right even if just cuz it's so boy and

302

00:13:49,450 --> 00:13:47,360

they want to be able to tell their

303

00:13:51,820 --> 00:13:49,460

friends how exciting this place nobody

304

00:13:53,320 --> 00:13:51,830

else went to was and someone's gonna

305

00:13:54,880 --> 00:13:53,330

find it cool if there's one thing the

306

00:13:56,920 --> 00:13:54,890

Internet has taught us is that no matter

307

00:13:59,440 --> 00:13:56,930

how boying the hobby would seem to be

308

00:14:01,180 --> 00:13:59,450

there are a lot of people who think it

309

00:14:02,320 --> 00:14:01,190

is the coolest thing ever that's right

310

00:14:03,700 --> 00:14:02,330

that is well you know that's why the

311

00:14:06,250 --> 00:14:03,710

cool thing is about nowadays you can

312

00:14:08,070 --> 00:14:06,260

find those 200 people on the planet who

313

00:14:11,950 --> 00:14:08,080

share your obsession with collecting

314

00:14:13,630 --> 00:14:11,960

19th century pennies and if Earth is a

315

00:14:15,280 --> 00:14:13,640

19th century penny that nobody else

316

00:14:16,750 --> 00:14:15,290

cares about there's still gonna be those

317

00:14:20,470 --> 00:14:16,760

billions of people out there on that

318

00:14:23,230 --> 00:14:20,480

Empire who think it's cool and so how do

319

00:14:25,690 --> 00:14:23,240

we how do we answer that when we think

320

00:14:28,330 --> 00:14:25,700

about the amount of and we're gonna take

321

00:14:30,370 --> 00:14:28,340

a break in in in just a minute here

322

00:14:32,980 --> 00:14:30,380

Isaac

323

00:14:38,170 --> 00:14:32,990

all of those civilizations that are out

324

00:14:42,670 --> 00:14:38,180

there in in the Milky Way that coming

325

00:14:46,809 --> 00:14:42,680

here is easy and we have only been here

326

00:14:49,120 --> 00:14:46,819

technically in an electrical sense for

327

00:14:50,350 --> 00:14:49,130

about a hundred years that they could

328

00:14:52,509 --> 00:14:50,360

have been here a hundred thousand years

329

00:14:55,569 --> 00:14:52,519

ago which is a blip of time a million

330

00:14:57,579 --> 00:14:55,579

years ago ten thousand years ago where

331

00:15:00,160 --> 00:14:57,589

there was no video cameras or

332

00:15:02,439 --> 00:15:00,170

photographs or a way to document any of

333

00:15:04,660 --> 00:15:02,449

this and they've simply moved on they

334

00:15:09,639 --> 00:15:04,670

know that earth is here and they may not

335

00:15:12,519 --> 00:15:09,649

be back fundamentally that one comes up

336

00:15:14,740 --> 00:15:12,529

the issue is you know Kansas is pretty

337

00:15:17,050 --> 00:15:14,750

well documented too but people still

338

00:15:18,939 --> 00:15:17,060

keep coming there every year not feeling

339

00:15:20,889 --> 00:15:18,949

bad for the folks in Kansas but it's

340

00:15:22,180 --> 00:15:20,899

probably alright that is about the

341

00:15:24,790 --> 00:15:22,190

boiling places to live

342

00:15:26,800 --> 00:15:24,800

say saying about Ohio we still get tons

343

00:15:28,300 --> 00:15:26,810

of loss I live in a tourist trap you

344

00:15:30,430 --> 00:15:28,310

know we get people visiting every summer

345

00:15:32,110 --> 00:15:30,440

by a thousand and I think it's boy

346

00:15:34,300 --> 00:15:32,120

that's why I like the place it's calm

347

00:15:38,230 --> 00:15:34,310

it's peaceful yet folks come by to visit

348

00:15:40,210 --> 00:15:38,240

for exactly that reason and so what you

349

00:15:42,280 --> 00:15:40,220

know how can you exhaust entire plants

350

00:15:43,840 --> 00:15:42,290

options we have changed

351
00:15:46,210 --> 00:15:43,850
they came here ten thousand years ago

352
00:15:47,860 --> 00:15:46,220
have we not had ten thousand years of

353
00:15:49,900 --> 00:15:47,870
history they might find interesting

354
00:15:53,050 --> 00:15:49,910
why would they not want to come back and

355
00:15:55,600 --> 00:15:53,060
see what's changed well I would say that

356
00:15:58,030 --> 00:15:55,610
they do right they do but that's the

357
00:15:59,980 --> 00:15:58,040
that's the best part of having this type

358
00:16:02,470 --> 00:15:59,990
of conversation tonight to give

359
00:16:05,199 --> 00:16:02,480
everybody something to think about

360
00:16:08,259 --> 00:16:05,209
on both sides of the fence and with that

361
00:16:10,090 --> 00:16:08,269
let's take our scheduled break right now

362
00:16:12,759 --> 00:16:10,100
our guest tonight is Isaac Arthur and

363
00:16:14,920 --> 00:16:12,769

when we come back we're discussing the

364

00:16:16,840 --> 00:16:14,930

Fermi paradox and when we come back

365

00:16:21,100 --> 00:16:16,850

we've got to jump into Stephen Hawking

366

00:16:23,889 --> 00:16:21,110

we're gonna get to the rest of the

367

00:16:25,540 --> 00:16:23,899

answers but I'm saving the best for last

368

00:16:27,210 --> 00:16:25,550

when we come back after this short break

369

00:16:50,920 --> 00:16:27,220

stay with us

370

00:16:53,600 --> 00:16:50,930

[Music]

371

00:16:56,420 --> 00:16:53,610

Viveca box here and you are listening to

372

00:17:01,870 --> 00:16:56,430

my boy Jimmy Church on Jimmy Jo's

373

00:17:06,059 --> 00:17:01,880

radio.com this my popular opinion

374

00:17:08,990 --> 00:17:06,069

reading a book will not make you smarter

375

00:17:12,059 --> 00:17:09,000

but listening to Jimmy church will

376

00:17:16,329 --> 00:17:12,069

[Applause]

377

00:17:18,220 --> 00:17:16,339

hurricanes earthquakes wildfires this

378

00:17:20,679 --> 00:17:18,230

year we've experienced more than our

379

00:17:22,990 --> 00:17:20,689

fair share this is Jimmy Church of fade

380

00:17:25,000 --> 00:17:23,000

to black and last month I decided to

381

00:17:27,429 --> 00:17:25,010

make sure my family does not have to

382

00:17:30,580 --> 00:17:27,439

worry about food should we get caught in

383

00:17:33,040 --> 00:17:30,590

a real emergency situation introducing

384

00:17:34,690 --> 00:17:33,050

Humana a healthy storable product that

385

00:17:36,730 --> 00:17:34,700

tastes so good that you'll want to eat

386

00:17:39,460 --> 00:17:36,740

it every day instead of just during

387

00:17:42,250 --> 00:17:39,470

those times of duress Illumina products

388

00:17:45,100 --> 00:17:42,260

have a 25 year shelf life our msg and

389

00:17:47,650 --> 00:17:45,110

GMO free no preservatives and are made

390

00:17:49,630 --> 00:17:47,660

in America with the new manna pack in

391

00:17:51,460 --> 00:17:49,640

your home you'll be able to sleep at

392

00:17:54,040 --> 00:17:51,470

night knowing that you protected your

393

00:17:57,760 --> 00:17:54,050

family not only have I tasted and tested

394

00:17:59,380 --> 00:17:57,770

I own it now you can too just click on

395

00:18:01,630 --> 00:17:59,390

the new mana banner on Jimmy Church

396

00:18:04,000 --> 00:18:01,640

radio.com and use the promo code Jimmy

397

00:18:05,890 --> 00:18:04,010

when you order in addition to a discount

398

00:18:09,780 --> 00:18:05,900

we'll send you an autograph fade to

399

00:18:12,010 --> 00:18:09,790

black t-shirt seriously gobekli tepe

400

00:18:14,980 --> 00:18:12,020

this is Jimmy Church of fade to black

401
00:18:18,640 --> 00:18:14,990
and I take life change tea supplements

402
00:18:23,040 --> 00:18:18,650
every single day it's what I do click on

403
00:18:28,570 --> 00:18:25,960
when you take the beans from Central

404
00:18:30,850 --> 00:18:28,580
America with dashes of indonesian and

405
00:18:32,890 --> 00:18:30,860
african mixed in and then roast it to

406
00:18:36,510 --> 00:18:32,900
the dark side of fade to black

407
00:18:39,460 --> 00:18:36,520
you create the ultimate brew of Fringe

408
00:18:42,670 --> 00:18:39,470
introducing the fade to black blend from

409
00:18:45,760 --> 00:18:42,680
River moon coffee yes River moons

410
00:18:47,950 --> 00:18:45,770
darkest customized roast was created for

411
00:18:50,980 --> 00:18:47,960
the love of fade to black

412
00:18:53,620 --> 00:18:50,990
the alchemy of masterful roasting and

413
00:18:57,220 --> 00:18:53,630

smoking the beans is in every sip of

414

00:19:00,190 --> 00:18:57,230

this full-bodied dark Java I need my

415

00:19:02,080 --> 00:19:00,200

coffee dog deep with distinct

416

00:19:05,260 --> 00:19:02,090

bittersweet chocolate highlights just

417

00:19:07,660 --> 00:19:05,270

like the bunker leaning further into the

418

00:19:10,600 --> 00:19:07,670

darkness of the roast is fade to black

419

00:19:12,220 --> 00:19:10,610

blend from rubber moon coffee

420

00:19:15,130 --> 00:19:12,230

click on the banner at Jimmy Church

421

00:19:18,720 --> 00:19:15,140

radio.com and use the promo code F to be

422

00:19:23,380 --> 00:19:18,730

blend for 15% off of your order today

423

00:19:25,240 --> 00:19:23,390

gobekli tepe hi folks CBD is the home

424

00:19:27,039 --> 00:19:25,250

run hitter for health right now why do

425

00:19:29,649 --> 00:19:27,049

you ask because of what it does for the

426

00:19:31,000 --> 00:19:29,659

body unfortunately I can't tell you all

427

00:19:33,490 --> 00:19:31,010

about the benefit you know there's

428

00:19:35,649 --> 00:19:33,500

reasons do your due diligence and log on

429

00:19:38,259 --> 00:19:35,659

to ancient life oil com that's ancient

430

00:19:40,240 --> 00:19:38,269

life oil com ancient life oil uses

431

00:19:42,130 --> 00:19:40,250

organic ingredients and is blended in

432

00:19:44,700 --> 00:19:42,140

coconut oil for some of the best

433

00:19:47,470 --> 00:19:44,710

benefits legal in 50 states and

434

00:19:51,430 --> 00:19:47,480

non-psychoactive log on to ancient life

435

00:19:53,350 --> 00:19:51,440

oil com that's ancient life oil com this

436

00:19:56,139 --> 00:19:53,360

is Jimmy Church of fade to black and my

437

00:19:59,529 --> 00:19:56,149

family is safe because of new mana

438

00:20:01,360 --> 00:19:59,539

emergency food storage just go to the

439

00:20:07,269 --> 00:20:01,370

new mana banner at Jimmy Church

440

00:20:09,970 --> 00:20:07,279

radio.com promo code jimmy 10 are you

441

00:20:12,490 --> 00:20:09,980

intrigued by paranormal talk radio you

442

00:20:15,460 --> 00:20:12,500

love the new paranormal radio app from

443

00:20:17,680 --> 00:20:15,470

torque stream live you'll find a great

444

00:20:20,799 --> 00:20:17,690

selection of talk shows covering UFOs

445

00:20:23,230 --> 00:20:20,809

ghosts strange phenomena and much more

446

00:20:25,450 --> 00:20:23,240

download the paranormal radio app now

447

00:20:27,789 --> 00:20:25,460

and start listening to the very best in

448

00:20:29,320 --> 00:20:27,799

paranormal talk entertainment including

449

00:20:32,289 --> 00:20:29,330

the network you're listening to right

450

00:20:42,600 --> 00:20:32,299

now the paranormal radio app free in

451
00:20:57,130 --> 00:20:46,299
it's not a lifestyle we chose we were

452
00:21:01,870 --> 00:20:57,140
born this way k GRA radio.com this is KJ

453
00:21:01,880 --> 00:21:13,870
[Music]

454
00:21:18,050 --> 00:21:16,280
welcome back paid to black I am your

455
00:21:21,260 --> 00:21:18,060
host Jimmy Church our guest tonight

456
00:21:23,980 --> 00:21:21,270
Isaac Arthur we're discussing the Fermi

457
00:21:28,910 --> 00:21:23,990
paradox saving the best for last

458
00:21:30,770 --> 00:21:28,920
and Isaac oh oh really quick Isaac my

459
00:21:33,260 --> 00:21:30,780
twitter is at J Church radio what is

460
00:21:36,680 --> 00:21:33,270
yours let me double check I think it's

461
00:21:37,670 --> 00:21:36,690
Isaac Isaac underscore a underscore thil

462
00:21:41,440 --> 00:21:37,680
there you go

463
00:21:44,810 --> 00:21:41,450

you always do that underscore and dots

464

00:21:48,770 --> 00:21:44,820

but I get it I get it - its it's Isaac

465

00:21:52,190 --> 00:21:48,780

underscore a underscore Arthur yeah okay

466

00:21:55,610 --> 00:21:52,200

now with I want to know how much you

467

00:21:58,640 --> 00:21:55,620

researched or read into you know guys

468

00:22:03,580 --> 00:21:58,650

like Stephen Hawking and and Carl Sagan

469

00:22:06,230 --> 00:22:03,590

in the past where I've always felt that

470

00:22:11,330 --> 00:22:06,240

Carl Sagan did a pretty good flip-flop

471

00:22:14,660 --> 00:22:11,340

on us where they came to UFOs and alien

472

00:22:16,970 --> 00:22:14,670

civilizations and the same thing with

473

00:22:20,030 --> 00:22:16,980

Stephen Hawking where I think he was

474

00:22:24,020 --> 00:22:20,040

very adventurous for for a period there

475

00:22:26,170 --> 00:22:24,030

and then went one pretty dark with alien

476

00:22:30,590 --> 00:22:26,180

contact and then turned around and

477

00:22:32,840 --> 00:22:30,600

wanted to fly no stuff to Alpha Centauri

478

00:22:35,210 --> 00:22:32,850

I think he gets a little bit of an

479

00:22:36,860 --> 00:22:35,220

unfair reputation about that towards the

480

00:22:38,630 --> 00:22:36,870

end he was often making comments and the

481

00:22:40,670 --> 00:22:38,640

media of us out anytime he'd say

482

00:22:41,900 --> 00:22:40,680

anything it was it was big news after he

483

00:22:43,610 --> 00:22:41,910

was just quoting something that was

484

00:22:46,100 --> 00:22:43,620

established science for a century or

485

00:22:47,900 --> 00:22:46,110

more you know he was a great speaker and

486

00:22:50,300 --> 00:22:47,910

teacher for the field but often he would

487

00:22:52,490 --> 00:22:50,310

say material that was you know classic

488

00:22:55,040 --> 00:22:52,500

poets the field and people say oh my god

489

00:22:57,470 --> 00:22:55,050

Hawking said this his suggestion that I

490

00:22:59,450 --> 00:22:57,480

think people forward to there is that we

491

00:23:01,670 --> 00:22:59,460

don't want to talk to aliens because if

492

00:23:03,500 --> 00:23:01,680

you go make a noise in the woods a

493

00:23:05,270 --> 00:23:03,510

predator might come and eat you and

494

00:23:07,550 --> 00:23:05,280

that's not his idea that's that's a very

495

00:23:10,850 --> 00:23:07,560

classic and so on that's the concept of

496

00:23:12,590 --> 00:23:10,860

Medi which is you know active SETI the

497

00:23:14,360 --> 00:23:12,600

idea that you don't try to listen you

498

00:23:16,040 --> 00:23:14,370

get out there and speak and someone

499

00:23:18,680 --> 00:23:16,050

who's gonna point out if you're out

500

00:23:20,420 --> 00:23:18,690

there all yelling really loudly someone

501
00:23:22,460 --> 00:23:20,430
might hear you and you might not want

502
00:23:25,580 --> 00:23:22,470
them to come by and let you know that

503
00:23:27,139 --> 00:23:25,590
they are there so I think he point that

504
00:23:29,180 --> 00:23:27,149
out very fairly a lot

505
00:23:31,729 --> 00:23:29,190
what do I do not worry much about active

506
00:23:33,739 --> 00:23:31,739
City though because the alien

507
00:23:35,479 --> 00:23:33,749
civilization shows up right now decide

508
00:23:37,070 --> 00:23:35,489
to invade us or hoard us that wants to

509
00:23:39,019 --> 00:23:37,080
do this that has space traveler that

510
00:23:40,940 --> 00:23:39,029
can't hear us it's not gonna be a

511
00:23:42,139 --> 00:23:40,950
contest they'd wipe us out so there's no

512
00:23:44,329 --> 00:23:42,149
point even worried about something like

513
00:23:46,669 --> 00:23:44,339

that we cannot hide from them that they

514

00:23:48,560 --> 00:23:46,679

want us dead they're gonna guess dead so

515

00:23:50,029 --> 00:23:48,570

it's a legitimate concern but there's

516

00:23:51,289 --> 00:23:50,039

nothing we can do about it it's like

517

00:23:52,969 --> 00:23:51,299

worried about an asteroid hitting your

518

00:23:54,709 --> 00:23:52,979

civilization if you live in ancient Rome

519

00:23:56,149 --> 00:23:54,719

you can't build a rock and to go blow

520

00:23:58,999 --> 00:23:56,159

that thing up so there's not much point

521

00:24:01,039 --> 00:23:59,009

worrying about it and I think that he

522

00:24:02,239 --> 00:24:01,049

wasn't really saying that this is

523

00:24:03,379 --> 00:24:02,249

something that we need to be worried

524

00:24:05,629 --> 00:24:03,389

about though he might have but I don't

525

00:24:06,979 --> 00:24:05,639

want to put words in his mouth I think

526
00:24:08,450 --> 00:24:06,989
he was just pointing out of that is one

527
00:24:12,139 --> 00:24:08,460
of those concerns we had to have about

528
00:24:16,459 --> 00:24:12,149
SETI is so is it dangerous to attempt

529
00:24:18,769 --> 00:24:16,469
communication no because and this is

530
00:24:20,959 --> 00:24:18,779
what it comes down to is they don't need

531
00:24:22,909 --> 00:24:20,969
to hear all radio signals if you have

532
00:24:25,820 --> 00:24:22,919
spaceflight and you've been around for a

533
00:24:27,859 --> 00:24:25,830
long time you already know about every

534
00:24:29,060 --> 00:24:27,869
plan out there that has life on it

535
00:24:30,499 --> 00:24:29,070
because you want waiting for radio

536
00:24:32,329 --> 00:24:30,509
signals she was sending out active

537
00:24:33,950 --> 00:24:32,339
probes to go look for stuff and you were

538
00:24:36,169 --> 00:24:33,960

building gigantic telescopes that can

539

00:24:38,089 --> 00:24:36,179

pick up signs of life on plants when

540

00:24:40,249 --> 00:24:38,099

there's just oxygen the atmosphere will

541

00:24:42,259 --> 00:24:40,259

be doing that inside of 20 years they've

542

00:24:45,440 --> 00:24:42,269

been doing that for millions videos and

543

00:24:47,749 --> 00:24:45,450

they saw us you know very early on so

544

00:24:49,729 --> 00:24:47,759

they're not gonna be hunting for radio

545

00:24:51,889 --> 00:24:49,739

signals if they want to go wipe out our

546

00:24:53,690 --> 00:24:51,899

life they're going to wipe out all life

547

00:24:54,799 --> 00:24:53,700

so there are so many ways you can do

548

00:24:57,739 --> 00:24:54,809

that without even leaving your home

549

00:24:59,719 --> 00:24:57,749

solar system and poor Gentile galaxy of

550

00:25:04,329 --> 00:24:59,729

people who do not have technology equal

551
00:25:07,190 --> 00:25:04,339
to Y alone when we go back and look at

552
00:25:09,619 --> 00:25:07,200
it's not the same kind of party today

553
00:25:13,089 --> 00:25:09,629
but when Tesla was building those

554
00:25:18,229 --> 00:25:13,099
ginormous radio towers right and and and

555
00:25:20,869 --> 00:25:18,239
Marconi and there were 100,000 watt you

556
00:25:23,930 --> 00:25:20,879
know blowtorch radio stations all over

557
00:25:26,450 --> 00:25:23,940
this planet how much of the cat was let

558
00:25:31,279 --> 00:25:26,460
out of the bag as far as visibility goes

559
00:25:33,109 --> 00:25:31,289
from you know 1890 until 1950 more than

560
00:25:34,909 --> 00:25:33,119
now because we're a lot quieter with our

561
00:25:37,190 --> 00:25:34,919
signals were more efficient but less

562
00:25:39,319 --> 00:25:37,200
than was necessary to see us cuz I mean

563
00:25:40,880 --> 00:25:39,329

you're doing a flyby of this planet

564

00:25:42,830 --> 00:25:40,890

2,000 years ago you

565

00:25:44,150 --> 00:25:42,840

the pyramids stick now like sore thumbs

566

00:25:45,560 --> 00:25:44,160

seemed like right over when the Great

567

00:25:46,340 --> 00:25:45,570

Wall got built but that's been around

568

00:25:48,920 --> 00:25:46,350

for quite some time

569

00:25:51,890 --> 00:25:48,930

mm-hmm and even before that you look

570

00:25:53,270 --> 00:25:51,900

back say uh uh half a mil years ago

571

00:25:54,800 --> 00:25:53,280

yeah and wonder what all those little

572

00:25:56,360 --> 00:25:54,810

files are doing on the force and you're

573

00:25:58,640 --> 00:25:56,370

gonna pick those up on night scopes

574

00:26:00,410 --> 00:25:58,650

pretty easy and then you go back before

575

00:26:02,870 --> 00:26:00,420

that you're looking for places where

576

00:26:06,950 --> 00:26:02,880

life might develop the big blue planets

577

00:26:09,080 --> 00:26:06,960

a pretty big giveaway so I don't see the

578

00:26:11,240 --> 00:26:09,090

video as being a risk to us because as

579

00:26:14,510 --> 00:26:11,250

loud as those supers all they're not

580

00:26:16,610 --> 00:26:14,520

nearly as loud as the wasn't I guess 200

581

00:26:18,320 --> 00:26:16,620

quadrillion watts of power being given

582

00:26:21,230 --> 00:26:18,330

off by this planet reflected from the

583

00:26:24,200 --> 00:26:21,240

Sun well what about the concept that was

584

00:26:27,590 --> 00:26:24,210

presented by Carl Sagan in his book

585

00:26:28,550 --> 00:26:27,600

contact and in the movie I'm trying to

586

00:26:30,560 --> 00:26:28,560

member what the differences were between

587

00:26:32,060 --> 00:26:30,570

their so they might want to contact us

588

00:26:34,310 --> 00:26:32,070

using the Planck scale is always

589

00:26:36,320 --> 00:26:34,320

thinking I remember from that but it's

590

00:26:39,920 --> 00:26:36,330

been so long so I saw that movie well

591

00:26:43,070 --> 00:26:39,930

they took our television signals and oh

592

00:26:45,470 --> 00:26:43,080

that's right right and then and and sent

593

00:26:48,920 --> 00:26:45,480

them back to us with a scramble in the

594

00:26:51,470 --> 00:26:48,930

in the carrier signal that biggest

595

00:26:53,390 --> 00:26:51,480

concern there is is that the the core

596

00:26:54,530 --> 00:26:53,400

idea is they didn't have to wait to then

597

00:26:56,300 --> 00:26:54,540

they might have waited then to make

598

00:26:58,070 --> 00:26:56,310

contact with us but that wouldn't have

599

00:27:00,110 --> 00:26:58,080

been new to them if they can reach out

600

00:27:02,000 --> 00:27:00,120

to us physically like that send probes

601
00:27:02,750 --> 00:27:02,010
you know then then they knew about us

602
00:27:04,520 --> 00:27:02,760
forehand

603
00:27:06,530 --> 00:27:04,530
why would you not go and investigate

604
00:27:08,300 --> 00:27:06,540
every planet in your Galaxy even if you

605
00:27:10,070 --> 00:27:08,310
didn't want to live on them there has to

606
00:27:12,320 --> 00:27:10,080
be some motivations while you're getting

607
00:27:14,600 --> 00:27:12,330
out into space and if you find other

608
00:27:15,800 --> 00:27:14,610
planets boy and B inhabit or not you're

609
00:27:17,720 --> 00:27:15,810
not understand settling them you not

610
00:27:19,400 --> 00:27:17,730
understanding exploiting them then

611
00:27:20,950 --> 00:27:19,410
you're not gonna be listening for radio

612
00:27:24,080 --> 00:27:20,960
signals either because you don't K oh

613
00:27:24,980 --> 00:27:24,090

well and so let's break this down really

614

00:27:27,560 --> 00:27:24,990

quick

615

00:27:33,020 --> 00:27:27,570

before we get to the the last question

616

00:27:36,050 --> 00:27:33,030

how fast is a radio signal how fast is

617

00:27:38,840 --> 00:27:36,060

it 300 million kilometres a second so I

618

00:27:42,410 --> 00:27:38,850

300 million meters per second very quick

619

00:27:46,130 --> 00:27:42,420

compared to light speed same speed it's

620

00:27:48,350 --> 00:27:46,140

is it the same speed radio signals are

621

00:27:50,120 --> 00:27:48,360

the exact same speed as any other

622

00:27:51,440 --> 00:27:50,130

infrared radiation in the vacuum they

623

00:27:53,180 --> 00:27:51,450

don't all move to quite the same speed

624

00:27:53,909 --> 00:27:53,190

inside my atmosphere or medium but it's

625

00:28:02,249 --> 00:27:53,919

pretty close

626
00:28:05,489 --> 00:28:02,259
simple math here and we just said okay

627
00:28:08,190 --> 00:28:05,499
let's go with 50 years right and then

628
00:28:11,279 --> 00:28:08,200
we're because I'm dealing with round

629
00:28:14,779 --> 00:28:11,289
numbers a hundred years we're at 2019 so

630
00:28:21,629 --> 00:28:14,789
the radio signals that were sent out in

631
00:28:23,700 --> 00:28:21,639
1919 that went 50 light years away is

632
00:28:25,200 --> 00:28:23,710
there will be out 200 by now but so be

633
00:28:28,470 --> 00:28:25,210
fifty years away could have sent back to

634
00:28:29,729 --> 00:28:28,480
us by now that's what that's you see I

635
00:28:32,430 --> 00:28:29,739
like the way you think that's why I'm

636
00:28:35,820 --> 00:28:32,440
going with this so somebody 50 light

637
00:28:38,159 --> 00:28:35,830
years away has received the signals now

638
00:28:39,180 --> 00:28:38,169

they know where we are and now they're

639

00:28:43,320 --> 00:28:39,190

headed this way

640

00:28:45,419 --> 00:28:43,330

wouldn't they be arriving about now they

641

00:28:47,279 --> 00:28:45,429

would be yeah now if they were waiting

642

00:28:48,899 --> 00:28:47,289

and they were just happy on a planet say

643

00:28:51,419 --> 00:28:48,909

you know 40 light years away they got

644

00:28:53,340 --> 00:28:51,429

all message 60 years ago and they still

645

00:28:54,330 --> 00:28:53,350

send a fleet our direction they might be

646

00:28:56,399 --> 00:28:54,340

getting here we don't know how fast

647

00:28:57,570 --> 00:28:56,409

those ships go it might be 10% of speed

648

00:28:59,129 --> 00:28:57,580

of light in which case we'll be a few

649

00:29:00,869 --> 00:28:59,139

centuries still right they could have

650

00:29:02,310 --> 00:29:00,879

got a signal back to us and they if they

651
00:29:03,869 --> 00:29:02,320
don't have ships can move fairly close

652
00:29:06,180 --> 00:29:03,879
to light speed they probably would send

653
00:29:07,680 --> 00:29:06,190
a signal back forced if you move fairly

654
00:29:10,249 --> 00:29:07,690
close to light speed though you probably

655
00:29:13,529 --> 00:29:10,259
would go that way because you're getting

656
00:29:15,539 --> 00:29:13,539
signals sooner once you know and closer

657
00:29:17,310 --> 00:29:15,549
and closer that time it gives you much

658
00:29:19,440 --> 00:29:17,320
more updated information so you might as

659
00:29:21,149 --> 00:29:19,450
well let your diplomatic team boil

660
00:29:23,070 --> 00:29:21,159
themselves down to the modern era when

661
00:29:25,289 --> 00:29:23,080
they arrive and do the talking for you

662
00:29:29,820 --> 00:29:25,299
without the risk of mistakes and that's

663
00:29:32,099 --> 00:29:29,830

exactly the point should we be concerned

664

00:29:34,379 --> 00:29:32,109

if you were the head of the United

665

00:29:37,109 --> 00:29:34,389

Nations would you have a delegation put

666

00:29:39,419 --> 00:29:37,119

together knowing that if we just went

667

00:29:43,830 --> 00:29:39,429

with simple math that 50 light-years

668

00:29:45,629 --> 00:29:43,840

away those potential civilizations know

669

00:29:49,139 --> 00:29:45,639

where we are and would be arriving

670

00:29:51,960 --> 00:29:49,149

shortly should we prepare something yes

671

00:29:53,369 --> 00:29:51,970

but not to talk to the aliens we want to

672

00:29:54,599 --> 00:29:53,379

make sure we have a prepared mechanism

673

00:29:56,070 --> 00:29:54,609

in place so they were not tripping over

674

00:29:57,989 --> 00:29:56,080

each other trying to figure out what to

675

00:29:59,460 --> 00:29:57,999

do if they do say hi and they're gonna

676
00:30:00,359 --> 00:29:59,470
know how to talk to us they came here

677
00:30:01,919 --> 00:30:00,369
they'll been listening to our radio

678
00:30:03,359 --> 00:30:01,929
signals and while they came in there

679
00:30:05,970 --> 00:30:03,369
I've had plenty time to pass them and

680
00:30:07,590 --> 00:30:05,980
they've got a game plan in mind we most

681
00:30:09,360 --> 00:30:07,600
need to make sure that we don't trip all

682
00:30:10,799 --> 00:30:09,370
Chavo as various war leaders child

683
00:30:13,169 --> 00:30:10,809
beside who's supposed to be doing the

684
00:30:14,760 --> 00:30:13,179
talking and you know which country gets

685
00:30:16,230 --> 00:30:14,770
taught forest and what kind of team we

686
00:30:18,270 --> 00:30:16,240
should be using and what message which

687
00:30:20,430 --> 00:30:18,280
was said and that's where the issues

688
00:30:21,930 --> 00:30:20,440

come to play mostly making sure that we

689

00:30:23,340 --> 00:30:21,940

don't fall to pieces we don't really

690

00:30:24,990 --> 00:30:23,350

need to put much effort into how to talk

691

00:30:26,370 --> 00:30:25,000

to them though cuz they'll have solved

692

00:30:30,630 --> 00:30:26,380

that issue they want to talk to us you

693

00:30:34,140 --> 00:30:30,640

know likelihood there is a lot of rumor

694

00:30:39,200 --> 00:30:34,150

going around in our community the United

695

00:30:41,580 --> 00:30:39,210

Nations has appointed forget the the

696

00:30:44,220 --> 00:30:41,590

what they're called but there is there

697

00:30:46,320 --> 00:30:44,230

is an interstellar ambassador in place

698

00:30:49,289 --> 00:30:46,330

right right do you think that they've

699

00:30:52,110 --> 00:30:49,299

got a game plan ready to go do you think

700

00:30:53,940 --> 00:30:52,120

that there is a an official portal

701
00:30:56,909 --> 00:30:53,950
called manual that's printed out and

702
00:30:57,330 --> 00:30:56,919
distributed just in case I wouldn't be

703
00:30:58,799 --> 00:30:57,340
spying

704
00:31:00,419 --> 00:30:58,809
to be honest I would kind of expect that

705
00:31:01,710 --> 00:31:00,429
to be public if there was one just

706
00:31:03,120 --> 00:31:01,720
because it would be you know from their

707
00:31:05,520 --> 00:31:03,130
perspective I think they'd mostly wind

708
00:31:06,960 --> 00:31:05,530
you know get enthusiasm involved with

709
00:31:08,909 --> 00:31:06,970
the party that's like when they did the

710
00:31:11,760 --> 00:31:08,919
when the CDC released that survive the

711
00:31:13,049 --> 00:31:11,770
zombie apocalypse manual yes I could

712
00:31:14,490 --> 00:31:13,059
easily see us doing something like that

713
00:31:16,169 --> 00:31:14,500

and I haven't be spies we already had

714

00:31:19,710 --> 00:31:16,179

and if not I'd certainly suggest it's

715

00:31:21,299 --> 00:31:19,720

good outreach but you know we we our

716

00:31:22,980 --> 00:31:21,309

contingency plan also I would assume

717

00:31:24,720 --> 00:31:22,990

that most countries keep a file

718

00:31:26,220 --> 00:31:24,730

somewhere on how to invade everybody

719

00:31:28,200 --> 00:31:26,230

including their best neighbors of the

720

00:31:29,580 --> 00:31:28,210

town next door their capital so I

721

00:31:31,500 --> 00:31:29,590

wouldn't be surprised if everybody had

722

00:31:33,330 --> 00:31:31,510

one of those lying around they might

723

00:31:35,220 --> 00:31:33,340

want to keep them secret or they might

724

00:31:36,419 --> 00:31:35,230

put them out there I ask you couldn't

725

00:31:38,820 --> 00:31:36,429

say on that it would to me would make

726

00:31:40,169 --> 00:31:38,830

sense to have such a manual I'm on The

727

00:31:42,029 --> 00:31:40,179

Skeptical in of things that still say

728

00:31:43,529 --> 00:31:42,039

have one you send spaceships out there I

729

00:31:45,510 --> 00:31:43,539

don't expect them to run anybody I just

730

00:31:47,820 --> 00:31:45,520

to include a manual what to do in case

731

00:31:49,169 --> 00:31:47,830

that happened even if I open up a reason

732

00:31:50,549 --> 00:31:49,179

and they're not worried about themselves

733

00:31:52,289 --> 00:31:50,559

the time because they know they got a

734

00:31:56,159 --> 00:31:52,299

manual thinking crack open and read if

735

00:32:01,260 --> 00:31:56,169

that happens I asked a police officer

736

00:32:04,350 --> 00:32:01,270

LAPD guy this is two years ago and I

737

00:32:05,880 --> 00:32:04,360

happened to I can't get into the details

738

00:32:08,460 --> 00:32:05,890

but I was hanging out with this guy for

739

00:32:12,930 --> 00:32:08,470

like two hours three hours and you know

740

00:32:15,630 --> 00:32:12,940

we're just talking and I said so UFO

741

00:32:19,080 --> 00:32:15,640

lands he goes what like a flying saucer

742

00:32:20,030 --> 00:32:19,090

I said yeah right there on hon Sherman

743

00:32:22,970 --> 00:32:20,040

Way

744

00:32:25,670 --> 00:32:22,980

and you're driving down the road UFO

745

00:32:29,120 --> 00:32:25,680

lands and starts blocking traffic what

746

00:32:32,270 --> 00:32:29,130

do you do yes I don't know and I said

747

00:32:33,920 --> 00:32:32,280

well have you been trained a you know

748

00:32:37,640 --> 00:32:33,930

has this ever been talked about he said

749

00:32:41,000 --> 00:32:37,650

no I said okay what would you do

750

00:32:44,690 --> 00:32:41,010

he goes uh well I'd call it in but I

751
00:32:47,440 --> 00:32:44,700
guess the National Guard you know that's

752
00:32:50,390 --> 00:32:47,450
I mean he was looking at me is so

753
00:32:52,880 --> 00:32:50,400
perplexed now I don't know if he's ever

754
00:32:55,310 --> 00:32:52,890
thought about UFOs or ETS or whatever

755
00:32:57,560 --> 00:32:55,320
but so maybe he's never thought about

756
00:33:00,500 --> 00:32:57,570
this he's never watched ancient aliens

757
00:33:04,220 --> 00:33:00,510
okay that's fine but as far as any

758
00:33:06,950 --> 00:33:04,230
official protocol goes he swore to me up

759
00:33:09,470 --> 00:33:06,960
and down there is nothing on the books

760
00:33:11,180 --> 00:33:09,480
for it no I'm got one you know I I

761
00:33:12,800 --> 00:33:11,190
assume we don't have one for my County

762
00:33:14,480 --> 00:33:12,810
someone would have thrown at my way out

763
00:33:17,960 --> 00:33:14,490

of Hume or less it was secret and nobody

764

00:33:20,240 --> 00:33:17,970

gives it so if there is one it's either

765

00:33:23,030 --> 00:33:20,250

but again you know we presumed I said we

766

00:33:26,030 --> 00:33:23,040

probably have a detailed invasion plan

767

00:33:27,560 --> 00:33:26,040

for Canada no one expects to use I'd

768

00:33:29,180 --> 00:33:27,570

imagine but it's it's probably lying

769

00:33:30,290 --> 00:33:29,190

around somewhere there's probably

770

00:33:31,910 --> 00:33:30,300

someone whose job it is to make sure

771

00:33:33,740 --> 00:33:31,920

it's up to date and we probably wouldn't

772

00:33:35,720 --> 00:33:33,750

follow it properly effect she had

773

00:33:37,280 --> 00:33:35,730

occasion to use it but you don't bother

774

00:33:39,500 --> 00:33:37,290

to distribute that's all the division

775

00:33:41,360 --> 00:33:39,510

command was because they got a million

776

00:33:42,650 --> 00:33:41,370

such contingency plans and the only

777

00:33:44,930 --> 00:33:42,660

Center the ones that they think I'll

778

00:33:46,280 --> 00:33:44,940

very likely come up and if it becomes

779

00:33:47,630 --> 00:33:46,290

more likely it something like that it's

780

00:33:49,580 --> 00:33:47,640

gonna come up that's when you send on

781

00:33:51,050 --> 00:33:49,590

the play and start updating it you know

782

00:33:52,640 --> 00:33:51,060

you can only prepare for contingencies

783

00:33:54,260 --> 00:33:52,650

to so much and a lot of the reason why

784

00:33:56,030 --> 00:33:54,270

you do some of weird all contingencies

785

00:33:59,210 --> 00:33:56,040

is to kind of yourself practice for

786

00:34:00,770 --> 00:33:59,220

thinking outside the box so I would be

787

00:34:03,490 --> 00:34:00,780

surprised if we didn't have them lying

788

00:34:06,230 --> 00:34:03,500

around um I just have to dust them off

789

00:34:07,610 --> 00:34:06,240

yeah hopefully someone's doing more in

790

00:34:09,669 --> 00:34:07,620

dust them off because even retreat is a

791

00:34:11,600 --> 00:34:09,679

theoretical exercise there's were an

792

00:34:13,639 --> 00:34:11,610

out-of-context problem we sometimes say

793

00:34:16,190 --> 00:34:13,649

well a Black Swan for something a little

794

00:34:17,869 --> 00:34:16,200

bit more of regular you know when the

795

00:34:20,389 --> 00:34:17,879

ship was in the home were made out of

796

00:34:22,040 --> 00:34:20,399

metal and your Neolithic civilization

797

00:34:24,080 --> 00:34:22,050

that you don't have any way to respond

798

00:34:25,310 --> 00:34:24,090

to that and one of the ways you can

799

00:34:26,450 --> 00:34:25,320

prepare for things like that where you

800

00:34:28,070 --> 00:34:26,460

just never would have thought about it

801
00:34:30,169 --> 00:34:28,080
is to keep the mine flexible and do a

802
00:34:33,090 --> 00:34:30,179
lot of these contingencies because there

803
00:34:34,860 --> 00:34:33,100
will be aspects of that you can't handle

804
00:34:36,180 --> 00:34:34,870
you know goon people start playing out

805
00:34:38,879 --> 00:34:36,190
into a riot because they're confused

806
00:34:40,169 --> 00:34:38,889
about what's going on right then you

807
00:34:42,780 --> 00:34:40,179
release do you know how to react to a

808
00:34:44,310 --> 00:34:42,790
riot so you have these things around you

809
00:34:45,870 --> 00:34:44,320
know to keep your mind flexible and to

810
00:34:47,669 --> 00:34:45,880
deal with those parts but you can deal

811
00:34:48,990 --> 00:34:47,679
with so I would actually go as well say

812
00:34:51,899 --> 00:34:49,000
so we didn't have a plan for that it'd

813
00:34:53,280 --> 00:34:51,909

be kind of irresponsible on the other

814

00:34:54,570 --> 00:34:53,290

hand folks might be nervous about making

815

00:34:56,730 --> 00:34:54,580

something at that for fear they get

816

00:34:59,040 --> 00:34:56,740

ridiculed and things like that so never

817

00:35:02,400 --> 00:34:59,050

government you know but you bring it up

818

00:35:04,530 --> 00:35:02,410

the that whole zombie apocalypse thing

819

00:35:08,700 --> 00:35:04,540

you know we laughed about it but that

820

00:35:11,550 --> 00:35:08,710

was that was a real contingency that was

821

00:35:13,230 --> 00:35:11,560

written up and studied hmm now to be

822

00:35:14,550 --> 00:35:13,240

fair was law the regular advice we tell

823

00:35:16,080 --> 00:35:14,560

her I wanted to have for disaster and

824

00:35:17,730 --> 00:35:16,090

the same apply for a lot of you know

825

00:35:20,250 --> 00:35:17,740

almost any catastrophe might think about

826

00:35:21,810 --> 00:35:20,260

you there are certain basic pat Puteri

827

00:35:22,980 --> 00:35:21,820

measures you should be taken and if it

828

00:35:24,060 --> 00:35:22,990

if this is a way that we can teach

829

00:35:25,980 --> 00:35:24,070

people about it because they find it

830

00:35:27,870 --> 00:35:25,990

interesting or funny or they squad joke

831

00:35:29,490 --> 00:35:27,880

about it all the metal you know that

832

00:35:31,050 --> 00:35:29,500

gets them thinking about it then they're

833

00:35:32,940 --> 00:35:31,060

thinking about it and that means that

834

00:35:34,890 --> 00:35:32,950

they are covered when some kind of

835

00:35:37,140 --> 00:35:34,900

catastrophe happens cuz they deal with a

836

00:35:38,310 --> 00:35:37,150

prank on their own and then let's go and

837

00:35:40,700 --> 00:35:38,320

cover down on it the folks who maybe

838

00:35:42,900 --> 00:35:40,710

didn't do so much of it because each

839

00:35:45,030 --> 00:35:42,910

cast we almost all that had the same

840

00:35:47,160 --> 00:35:45,040

basic playbook a lot of variations

841

00:35:49,980 --> 00:35:47,170

balada core stuff is the same yeah

842

00:35:54,630 --> 00:35:49,990

absolutely absolutely which takes us to

843

00:35:57,450 --> 00:35:54,640

our last answer the question is where is

844

00:36:00,150 --> 00:35:57,460

et where is everybody

845

00:36:04,140 --> 00:36:00,160

and the answer is they are here

846

00:36:07,350 --> 00:36:04,150

unacknowledged that is you know we often

847

00:36:09,090 --> 00:36:07,360

say that that's the least popular and so

848

00:36:10,710 --> 00:36:09,100

for a lot of folks in the scientific

849

00:36:14,610 --> 00:36:10,720

community but in fact it's probably the

850

00:36:16,770 --> 00:36:14,620

number two most favored to answer how

851

00:36:20,160 --> 00:36:16,780

have the Fermi paradox and the Pony

852

00:36:22,080 --> 00:36:20,170

paradox says one basic question if this

853

00:36:24,690 --> 00:36:22,090

universe is so big where we have so much

854

00:36:26,700 --> 00:36:24,700

life in it way all all the aliens and

855

00:36:28,350 --> 00:36:26,710

that force category we have the way

856

00:36:31,440 --> 00:36:28,360

earth ones is not a good Fermi paradox

857

00:36:33,810 --> 00:36:31,450

solution because it says there's no

858

00:36:35,310 --> 00:36:33,820

paradox at all the universe is big but

859

00:36:36,930 --> 00:36:35,320

we shouldn't assume life is very common

860

00:36:38,790 --> 00:36:36,940

from that right the other half of that

861

00:36:40,920 --> 00:36:38,800

of course is where are all the aliens

862

00:36:42,660 --> 00:36:40,930

and so the answer is right here all

863

00:36:44,040 --> 00:36:42,670

we're just not admitting that they also

864

00:36:45,870 --> 00:36:44,050

to ourselves or to the rest of

865

00:36:46,680 --> 00:36:45,880

population then that's also not a for me

866

00:36:49,440 --> 00:36:46,690

paradox and so

867

00:36:55,140 --> 00:36:49,450

because there's no paradox the questions

868

00:36:56,970 --> 00:36:55,150

wrong he says why are they here so it

869

00:36:58,740 --> 00:36:56,980

breaks the basic paradigm they're same

870

00:37:00,599 --> 00:36:58,750

as with the way or they are not really

871

00:37:03,120 --> 00:37:00,609

fundamentally for me paradox solutions

872

00:37:06,000 --> 00:37:03,130

because the Fermi paradox is assuming

873

00:37:08,280 --> 00:37:06,010

life should be very common and we don't

874

00:37:09,540 --> 00:37:08,290

see it and that's a problem though we

875

00:37:11,040 --> 00:37:09,550

need because at that point we can't

876

00:37:12,780 --> 00:37:11,050

disprove they're here or prove they're

877

00:37:14,130 --> 00:37:12,790

here based on what we have so far it's

878

00:37:18,329 --> 00:37:14,140

not conclusive enough to convince most

879

00:37:21,000 --> 00:37:18,339

people and yet it it comes down to

880

00:37:22,620 --> 00:37:21,010

motives with any of these scenarios we

881

00:37:23,609 --> 00:37:22,630

can't say they can't hide from us

882

00:37:25,680 --> 00:37:23,619

because they might have better

883

00:37:27,720 --> 00:37:25,690

technology than us there are so many

884

00:37:29,339 --> 00:37:27,730

reasons why they might visit and for

885

00:37:30,839 --> 00:37:29,349

each one of those we have to say what is

886

00:37:32,609 --> 00:37:30,849

the motivation and how should they be

887

00:37:34,770 --> 00:37:32,619

behaving if that's what they're doing

888

00:37:37,200 --> 00:37:34,780

based on what we see what is the

889

00:37:39,150 --> 00:37:37,210

motivation so even if that's the

890

00:37:40,800 --> 00:37:39,160

solution the if it is good they all heal

891

00:37:42,089 --> 00:37:40,810

and which is now acknowledging them it

892

00:37:44,309 --> 00:37:42,099

still doesn't answer the question

893

00:37:47,130 --> 00:37:44,319

because the question really isn't all

894

00:37:47,460 --> 00:37:47,140

there aliens the question is what are

895

00:37:49,470 --> 00:37:47,470

they up to

896

00:37:51,059 --> 00:37:49,480

what's the civilization like you know I

897

00:37:53,130 --> 00:37:51,069

don't want to know that dolphins exist I

898

00:37:55,109 --> 00:37:53,140

want to know about dolphins and so

899

00:37:57,809 --> 00:37:55,119

they're all aliens here visiting us in

900

00:37:59,550 --> 00:37:57,819

secret I want to know what they want you

901
00:38:00,930 --> 00:37:59,560
know what what motivates them what's

902
00:38:03,660 --> 00:38:00,940
their purpose what do they want to do

903
00:38:05,010 --> 00:38:03,670
and we can see a million saw one of them

904
00:38:07,200 --> 00:38:05,020
could land right there in the middle of

905
00:38:08,550 --> 00:38:07,210
LA like you suggested and that still

906
00:38:10,200 --> 00:38:08,560
doesn't answer the question for us it's

907
00:38:12,599 --> 00:38:10,210
when they get out and they talk to us

908
00:38:15,089 --> 00:38:12,609
and they answer all questions that's

909
00:38:20,579 --> 00:38:15,099
when we get a solution do you think that

910
00:38:23,579 --> 00:38:20,589
we would actually be close to some of

911
00:38:26,550 --> 00:38:23,589
our ideas or theories now or would we

912
00:38:30,500 --> 00:38:26,560
just not have a clue why they were here

913
00:38:33,000 --> 00:38:30,510

we would just be completely wrong oh I

914

00:38:34,559 --> 00:38:33,010

would say my skepticism in that regard

915

00:38:36,030 --> 00:38:34,569

is to assume that we're always going to

916

00:38:37,770 --> 00:38:36,040

be completely wrong and all assumptions

917

00:38:39,780 --> 00:38:37,780

on things like this and every one of

918

00:38:42,210 --> 00:38:39,790

these things I would say I don't think

919

00:38:43,319 --> 00:38:42,220

either phony paradox answers is probably

920

00:38:45,720 --> 00:38:43,329

gonna turn out to be right

921

00:38:48,809 --> 00:38:45,730

insofar as most of them it's the answer

922

00:38:50,190 --> 00:38:48,819

is why are they the least wrong when you

923

00:38:52,079 --> 00:38:50,200

look at this there's got to be something

924

00:38:53,849 --> 00:38:52,089

wrong in all basic thinking even with

925

00:38:56,339 --> 00:38:53,859

the ultra biotechnology and auth

926
00:38:58,890 --> 00:38:56,349
hypothesis the flower there would have

927
00:39:00,390 --> 00:38:58,900
to be our doll post geocentric view of

928
00:39:02,730 --> 00:39:00,400
the universe we spend century

929
00:39:05,370 --> 00:39:02,740
convincing ourselves that authors not

930
00:39:07,770 --> 00:39:05,380
unique and not very important and yet if

931
00:39:10,500 --> 00:39:07,780
life is that rail that entire mindset

932
00:39:12,060 --> 00:39:10,510
that authors not all that special it's

933
00:39:14,310 --> 00:39:12,070
just wrong and that's a flaw nor

934
00:39:15,990 --> 00:39:14,320
thinking alternatively you know with

935
00:39:17,070 --> 00:39:16,000
each one of these there has to be some

936
00:39:18,900 --> 00:39:17,080
core flaw

937
00:39:21,360 --> 00:39:18,910
you know our philosophy our post

938
00:39:23,850 --> 00:39:21,370

knowledge all in what we know about the

939

00:39:25,440 --> 00:39:23,860

universe does fall and that's that's

940

00:39:27,180 --> 00:39:25,450

what's kind of cool about the phony

941

00:39:29,070 --> 00:39:27,190

paradox seeing today is we know the

942

00:39:31,410 --> 00:39:29,080

answer is could be something that

943

00:39:34,890 --> 00:39:31,420

requires us to change the way we look at

944

00:39:38,550 --> 00:39:34,900

the universe in some major fashion does

945

00:39:40,860 --> 00:39:38,560

that scare you in that there's there's

946

00:39:44,210 --> 00:39:40,870

two things that really freaked me out

947

00:39:46,830 --> 00:39:44,220

one that there's no life after death

948

00:39:50,010 --> 00:39:46,840

that scares the crap out of me that you

949

00:39:52,290 --> 00:39:50,020

just die and turn into cosmic dust and

950

00:39:55,980 --> 00:39:52,300

you achieve your place in evolution and

951
00:39:57,720 --> 00:39:55,990
there's nothing else to it that scares

952
00:39:59,700 --> 00:39:57,730
the crap out of me and you know what

953
00:40:03,120 --> 00:39:59,710
else scares the crap out of me Isaac is

954
00:40:07,710 --> 00:40:03,130
that there are people out there that

955
00:40:09,600 --> 00:40:07,720
think that we are it that there is no

956
00:40:12,720 --> 00:40:09,610
other life in the universe and if that

957
00:40:15,420 --> 00:40:12,730
is the case if there's nothing to live

958
00:40:17,850 --> 00:40:15,430
for then why don't we just burn this

959
00:40:19,940 --> 00:40:17,860
planet down man why don't we just party

960
00:40:22,920 --> 00:40:19,950
like it's 1999

961
00:40:24,750 --> 00:40:22,930
well if we were the only life in the

962
00:40:26,310 --> 00:40:24,760
universe and I mean I Ted think we'll

963
00:40:28,110 --> 00:40:26,320

probably it for the galaxies in terms of

964

00:40:31,160 --> 00:40:28,120

technology but the universe a big place

965

00:40:33,270 --> 00:40:31,170

you know galaxies a tiny tiny corner and

966

00:40:35,490 --> 00:40:33,280

but if we did to an out to be the only

967

00:40:36,990 --> 00:40:35,500

intelligent life that ever isn't so far

968

00:40:38,930 --> 00:40:37,000

and and not saying no was gonna come

969

00:40:42,060 --> 00:40:38,940

into play anywhere for billions of years

970

00:40:43,980 --> 00:40:42,070

then that means that you know we will

971

00:40:46,020 --> 00:40:43,990

voted aliens one day as we get out there

972

00:40:47,730 --> 00:40:46,030

and we make new buttons we just go to

973

00:40:50,640 --> 00:40:47,740

war after world and settle them and they

974

00:40:53,370 --> 00:40:50,650

diverge and it would be such a tragedy

975

00:40:55,350 --> 00:40:53,380

if we were the only ones and we stayed

976
00:40:57,000 --> 00:40:55,360
here and that's one of the reasons why I

977
00:40:58,830 --> 00:40:57,010
figure is somebody would have had to be

978
00:41:00,150 --> 00:40:58,840
forced whether it's us or not somebody

979
00:41:02,100 --> 00:41:00,160
was the forced on the scene and they

980
00:41:03,150 --> 00:41:02,110
local actor Cornell and they'd have to

981
00:41:05,520 --> 00:41:03,160
be thinking the same stuff we're

982
00:41:08,490 --> 00:41:05,530
thinking right now and if that's the

983
00:41:10,980 --> 00:41:08,500
case what a shame would be if they said

984
00:41:12,450 --> 00:41:10,990
no we're gonna stay heal

985
00:41:13,799 --> 00:41:12,460
I can't see them doing that I have to

986
00:41:16,680 --> 00:41:13,809
think that they would get out there and

987
00:41:18,809 --> 00:41:16,690
explore and expand and colonize it's

988
00:41:20,250 --> 00:41:18,819

because the universes is you know we

989

00:41:23,040 --> 00:41:20,260

always talk about how interesting space

990

00:41:24,809 --> 00:41:23,050

is space is really boring when you're

991

00:41:26,670 --> 00:41:24,819

only looking at just the rocks and the

992

00:41:27,900 --> 00:41:26,680

stars Aniyah the science the astronomy

993

00:41:30,180 --> 00:41:27,910

is awesome but there's a lot of

994

00:41:31,950 --> 00:41:30,190

repetition the uniqueness the coolness

995

00:41:33,839 --> 00:41:31,960

is what life does

996

00:41:36,990 --> 00:41:33,849

I couldn't imagine leave you all these

997

00:41:38,609 --> 00:41:37,000

systems the galaxy Baylin I'd want to

998

00:41:39,870 --> 00:41:38,619

get out there and explore them and if I

999

00:41:44,849 --> 00:41:39,880

found they were empty I'd want to put

1000

00:41:48,329 --> 00:41:44,859

something there yeah I mean the the goal

1001
00:41:49,950 --> 00:41:48,339
should be I would think that the goal

1002
00:41:54,030 --> 00:41:49,960
should be right now we should be

1003
00:41:57,240 --> 00:41:54,040
building interstellar generational ships

1004
00:41:59,970 --> 00:41:57,250
right now that's we shouldn't be focused

1005
00:42:02,130 --> 00:41:59,980
on anything else but that and putting

1006
00:42:04,530 --> 00:42:02,140
you know three four or five thousand

1007
00:42:06,930 --> 00:42:04,540
people on them and shooting them off in

1008
00:42:10,890 --> 00:42:06,940
a direction whether it's Alpha Centauri

1009
00:42:12,900 --> 00:42:10,900
right I don't care pick pick pick

1010
00:42:14,339 --> 00:42:12,910
something and just head out in that

1011
00:42:17,039 --> 00:42:14,349
direction and eventually you're gonna

1012
00:42:18,780 --> 00:42:17,049
get there but this planet here isn't

1013
00:42:19,859 --> 00:42:18,790

going to be around forever and our Sun

1014

00:42:22,260 --> 00:42:19,869

is not either

1015

00:42:23,940 --> 00:42:22,270

and that's what we should be planning on

1016

00:42:28,170 --> 00:42:23,950

is getting off this planet we should

1017

00:42:31,349 --> 00:42:28,180

have a goal that unifies us all there is

1018

00:42:34,079 --> 00:42:31,359

so much out there that we can do and you

1019

00:42:35,579 --> 00:42:34,089

know we somewhere along the line we

1020

00:42:38,220 --> 00:42:35,589

start off on this earth it's a small

1021

00:42:40,049 --> 00:42:38,230

tribe in one location and we spread out

1022

00:42:41,250 --> 00:42:40,059

even though we couldn't talk to each

1023

00:42:43,319 --> 00:42:41,260

other you know you can't maintain a

1024

00:42:45,599 --> 00:42:43,329

civilization without faster night travel

1025

00:42:47,940 --> 00:42:45,609

or big distances but you can set and

1026

00:42:49,859 --> 00:42:47,950

colonies out all those folks who set it

1027

00:42:51,900 --> 00:42:49,869

all across the planet back in the dawn

1028

00:42:53,549 --> 00:42:51,910

of time as a war they couldn't talk to

1029

00:42:55,230 --> 00:42:53,559

each other but they still spread out

1030

00:42:58,200 --> 00:42:55,240

they still send their sons and daughters

1031

00:42:59,970 --> 00:42:58,210

off to new places and I can't see us not

1032

00:43:02,039 --> 00:42:59,980

doing that and it's so hard for me to

1033

00:43:03,780 --> 00:43:02,049

imagine any other species choosing to do

1034

00:43:06,780 --> 00:43:03,790

that sunlight but they can't be the

1035

00:43:08,490 --> 00:43:06,790

majority they can't be all of them so

1036

00:43:10,410 --> 00:43:08,500

somebody's got to be out there doing it

1037

00:43:11,700 --> 00:43:10,420

and they're none this is where we always

1038

00:43:14,039 --> 00:43:11,710

come back to the possibility that we

1039

00:43:15,450 --> 00:43:14,049

might be really real I have to think it

1040

00:43:18,480 --> 00:43:15,460

was because we just happen to be the

1041

00:43:19,620 --> 00:43:18,490

first on the scene but if we're not the

1042

00:43:22,049 --> 00:43:19,630

only thing that can make sense to me is

1043

00:43:23,099 --> 00:43:22,059

either in the long haul civilizations

1044

00:43:26,220 --> 00:43:23,109

just collapse out of

1045

00:43:28,170 --> 00:43:26,230

essential dread or they get out there in

1046

00:43:29,549 --> 00:43:28,180

colonized places and for some reason

1047

00:43:31,200 --> 00:43:29,559

they just haven't talked to us yet and

1048

00:43:33,509 --> 00:43:31,210

there's so many reasons that could be

1049

00:43:36,029 --> 00:43:33,519

the case you may be they do follow the

1050

00:43:37,710 --> 00:43:36,039

prime directive maybe they we just see

1051
00:43:40,140 --> 00:43:37,720
the occasional accident where somebody

1052
00:43:41,700 --> 00:43:40,150
gets exposed but they are trying to you

1053
00:43:44,309 --> 00:43:41,710
know keep things fairly quiet so don't

1054
00:43:46,079 --> 00:43:44,319
disrupt us too much I can't imagine they

1055
00:43:47,910 --> 00:43:46,089
have not taken interest on us if they

1056
00:43:49,380 --> 00:43:47,920
all here you know if they all around the

1057
00:43:53,059 --> 00:43:49,390
area how could they not find us

1058
00:43:58,759 --> 00:43:53,069
interesting we would yes or no question

1059
00:44:03,329 --> 00:43:58,769
would you go to Mars one way trip no

1060
00:44:05,609 --> 00:44:03,339
just gave us the best case scenario of

1061
00:44:07,349 --> 00:44:05,619
generational ships and colonizing but

1062
00:44:10,200 --> 00:44:07,359
you won't sign up for Mars

1063
00:44:12,239 --> 00:44:10,210

if nobody else would I certainly would

1064

00:44:13,769 --> 00:44:12,249

but my philosophy they said well this I

1065

00:44:16,319 --> 00:44:13,779

got most of my traveling done when I was

1066

00:44:18,599 --> 00:44:16,329

younger I like staying at a home right

1067

00:44:20,849 --> 00:44:18,609

now and my nice quiet little rule you

1068

00:44:22,559 --> 00:44:20,859

know Haven there are so many people who

1069

00:44:24,749 --> 00:44:22,569

would be lying up for the chance you

1070

00:44:26,489 --> 00:44:24,759

know if this planet was getting ready to

1071

00:44:28,349 --> 00:44:26,499

go and we had a hundred million people

1072

00:44:30,569 --> 00:44:28,359

that we could take off plan to some new

1073

00:44:32,460 --> 00:44:30,579

wall before the plant blew up I would

1074

00:44:33,900 --> 00:44:32,470

give my ticket away if I was lucky

1075

00:44:35,519 --> 00:44:33,910

enough to win one because I'd rather

1076

00:44:37,079 --> 00:44:35,529

stay here and give to somebody else who

1077

00:44:39,390 --> 00:44:37,089

we are why are you out there and explore

1078

00:44:41,819 --> 00:44:39,400

I would love to hear about what they see

1079

00:44:44,039 --> 00:44:41,829

but I'm personally quite happy to stay

1080

00:44:45,660 --> 00:44:44,049

behind and let the folks who enjoy the

1081

00:44:47,430 --> 00:44:45,670

exploration and go do that

1082

00:44:50,190 --> 00:44:47,440

Issac thank you for this conversation

1083

00:44:52,410 --> 00:44:50,200

tonight and let everybody know where

1084

00:44:54,359 --> 00:44:52,420

they can come and find you well thank

1085

00:44:55,859 --> 00:44:54,369

you for having me on Jimmy if you enjoy

1086

00:44:58,289 --> 00:44:55,869

the material more about the fully

1087

00:45:01,440 --> 00:44:58,299

paradox or colonizing galaxy just check

1088

00:45:05,489 --> 00:45:01,450

out YouTube Issac our Thor or Isaac or

1089

00:45:08,279 --> 00:45:05,499

Thor dotnet and how often do you put out

1090

00:45:11,549 --> 00:45:08,289

new material well we put out a weekly

1091

00:45:13,170 --> 00:45:11,559

episode every Thursday morning and we do

1092

00:45:15,059 --> 00:45:13,180

occasional some live streams of bonus

1093

00:45:17,970 --> 00:45:15,069

material too but every Thursday morning

1094

00:45:20,009 --> 00:45:17,980

new episode and really quick you have a

1095

00:45:23,880 --> 00:45:20,019

team that is behind you it's not just

1096

00:45:26,849 --> 00:45:23,890

all about Isaac Arthur who'd you like to

1097

00:45:29,700 --> 00:45:26,859

recognize with your team I think for

1098

00:45:31,440 --> 00:45:29,710

tonight we all recognize soggy Oh potato

1099

00:45:33,569 --> 00:45:31,450

is one of our artists working on some

1100

00:45:36,359 --> 00:45:33,579

the episode material for cloud city's

1101
00:45:37,650 --> 00:45:36,369
episode next next week and I think folks

1102
00:45:39,299 --> 00:45:37,660
love that we have so many wonderful

1103
00:45:40,859 --> 00:45:39,309
people though that have been helping out

1104
00:45:43,470 --> 00:45:40,869
on the channel that have just made it so

1105
00:45:46,650 --> 00:45:43,480
much better yeah yeah that's the thing

1106
00:45:49,920 --> 00:45:46,660
you can you can do one of two things

1107
00:45:53,269 --> 00:45:49,930
with your stuff over on the channel you

1108
00:45:55,680 --> 00:45:53,279
can just sit and listen in the dark or

1109
00:45:57,749 --> 00:45:55,690
visually and just go through the videos

1110
00:46:00,390 --> 00:45:57,759
the amount of work and production that

1111
00:46:02,999 --> 00:46:00,400
goes into each one is a true labor of

1112
00:46:04,710 --> 00:46:03,009
love and it's great to watch so thank

1113
00:46:07,559 --> 00:46:04,720

you for all that you do Isaac it's just

1114

00:46:09,269 --> 00:46:07,569

an amazing body of work now thank you

1115

00:46:11,220 --> 00:46:09,279

for so much for having me on Jimmy and

1116

00:46:16,380 --> 00:46:11,230

we'll talk soon Thank You Isaac

1117

00:46:19,410 --> 00:46:16,390

Oh Isaac say good night good night good

1118

00:46:22,049 --> 00:46:19,420

night I thought I lost you again at the

1119

00:46:23,730 --> 00:46:22,059

end of the show all right Isaac Arthur

1120

00:46:25,319 --> 00:46:23,740

everybody I'm gonna run credits and get

1121

00:46:29,430 --> 00:46:25,329

out of here thank you so much Isaac it

1122

00:46:30,809 --> 00:46:29,440

is Isaac Arthur dotnet and his youtube

1123

00:46:35,249 --> 00:46:30,819

channel and everything else is right

1124

00:46:37,620 --> 00:46:35,259

there also Facebook Arthur I sort of

1125

00:46:39,950 --> 00:46:37,630

Isaac out there hangs out on Facebook

1126

00:46:41,880 --> 00:46:39,960

you can do whatever you need to do

1127

00:46:44,519 --> 00:46:41,890

alright I'll see everybody tomorrow

1128

00:46:46,589 --> 00:46:44,529

night right here for Fator night open

1129

00:46:49,920 --> 00:46:46,599

lines all night long we also have Serena

1130

00:46:51,390 --> 00:46:49,930

by Taylor and Douglas Taylor to warm up

1131

00:46:53,309 --> 00:46:51,400

the show tomorrow night they de box

1132

00:46:56,039 --> 00:46:53,319

executive producers Radhika Murray on

1133

00:46:58,319 --> 00:46:56,049

shows produced by Hilton Jay Paul Renee

1134

00:47:00,239 --> 00:46:58,329

Dennis and Bob announcers our Steve

1135

00:47:02,400 --> 00:47:00,249

Carter gene photo will mark D kovar

1136

00:47:05,370 --> 00:47:02,410

webmaster is true the geek music doug

1137

00:47:07,890 --> 00:47:05,380

aldrich intro space boy space boy music

1138

00:47:09,839 --> 00:47:07,900

calm fade to black is produced by

1139

00:47:13,410 --> 00:47:09,849

kjsurya the GameChanger network in

1140

00:47:15,749 --> 00:47:13,420

syndication as kg ra the planet whose

1141

00:47:17,460 --> 00:47:15,759

podcast on the copyright of 2019 by fade

1142

00:47:19,710 --> 00:47:17,470

to black in the game changer network it

1143

00:47:21,620 --> 00:47:19,720

cannot be rebroadcast downloaded copied

1144

00:47:24,120 --> 00:47:21,630

or use anywhere in the known universe

1145

00:47:25,739 --> 00:47:24,130

without written permission from fade to

1146

00:47:26,729 --> 00:47:25,749

black of the GameChanger network i'm

1147

00:47:29,849 --> 00:47:26,739

arrows to meet church

1148

00:47:31,059 --> 00:47:29,859

follow me on twitter @ JT radio until

1149

00:47:44,060 --> 00:47:31,069

tomorrow night