



1  
00:00:06,170 --> 00:00:02,409  
well welcome to the afternoon session

2  
00:00:09,530 --> 00:00:06,180  
I'm going to ask a question here is God

3  
00:00:12,110 --> 00:00:09,540  
a mathematician well this was a book

4  
00:00:13,879 --> 00:00:12,120  
that a colleague of mine an astronomer

5  
00:00:16,340 --> 00:00:13,889  
professor Mario Livio wrote a few years

6  
00:00:18,050 --> 00:00:16,350  
ago and I think it's a very profound

7  
00:00:19,790 --> 00:00:18,060  
question in fact that very profound

8  
00:00:24,170 --> 00:00:19,800  
question I think isn't one that can be

9  
00:00:27,200 --> 00:00:24,180  
extended down to all levels of reality

10  
00:00:28,580 --> 00:00:27,210  
giving us a theory of everything that's

11  
00:00:33,200 --> 00:00:28,590  
a radically new one which is of course

12  
00:00:36,319 --> 00:00:33,210  
the title of the talk a theory of

13  
00:00:38,450 --> 00:00:36,329

everything well what we mean by that was

14

00:00:43,100 --> 00:00:38,460

a hypothetical all-encompassing coherent

15

00:00:45,279 --> 00:00:43,110

framework that fully explains and links

16

00:00:47,330 --> 00:00:45,289

together all aspects of the universe now

17

00:00:49,490 --> 00:00:47,340

finding a theory of everything is one of

18

00:00:52,069 --> 00:00:49,500

the major unsolved problems in physics

19

00:00:54,380 --> 00:00:52,079

but note how this physics basis is sort

20

00:00:56,270 --> 00:00:54,390

of taken for granted everything refers

21

00:00:58,970 --> 00:00:56,280

to everything as long as physics is at

22

00:01:00,380 --> 00:00:58,980

the basis of it well I think that I have

23

00:01:05,329 --> 00:01:00,390

a way of looking at things that will be

24

00:01:07,310 --> 00:01:05,339

quite a bit different in this book by

25

00:01:09,590 --> 00:01:07,320

Stephen Hawking I believe this was his

26

00:01:11,750 --> 00:01:09,600

first one a brief history of time he

27

00:01:13,640 --> 00:01:11,760

wrote if we discover a complete theory

28

00:01:16,670 --> 00:01:13,650

then we shall all be able to take part

29

00:01:18,859 --> 00:01:16,680

in the discussions of why it is that we

30

00:01:20,929 --> 00:01:18,869

and the universe exist it would be the

31

00:01:22,510 --> 00:01:20,939

ultimate triumph of human reason for

32

00:01:24,800 --> 00:01:22,520

then we should know the mind of God

33

00:01:26,270 --> 00:01:24,810

well I'm sure that would be a very nice

34

00:01:27,980 --> 00:01:26,280

thing to do and I'm not sure that

35

00:01:30,410 --> 00:01:27,990

Stephen Hawking would let him on anyone

36

00:01:33,620 --> 00:01:30,420

else question to God and himself but

37

00:01:36,260 --> 00:01:33,630

before we before we take too much put

38

00:01:37,999 --> 00:01:36,270

too much credence in this mind of God as

39

00:01:41,359 --> 00:01:38,009

viewed by Hawking that somebody really

40

00:01:43,370 --> 00:01:41,369

meant what I meant by we would know the

41

00:01:44,929 --> 00:01:43,380

mind of God is we would know everything

42

00:01:48,920 --> 00:01:44,939

that God would know if there was a God

43

00:01:50,870 --> 00:01:48,930

but there isn't I'm an atheist well okay

44

00:01:55,999 --> 00:01:50,880

so much for that to approach to a theory

45

00:02:01,740 --> 00:02:00,029

there is a a new discipline new paradigm

46

00:02:04,109 --> 00:02:01,750

emerging in science called digital

47

00:02:06,179 --> 00:02:04,119

physics a collection of theoretical

48

00:02:08,669 --> 00:02:06,189

concepts based on the premise that the

49

00:02:10,949 --> 00:02:08,679

universe can be thought of as consisting

50

00:02:13,050 --> 00:02:10,959

of information rather than matter and

51  
00:02:16,020 --> 00:02:13,060  
energy now information

52  
00:02:18,210 --> 00:02:16,030  
well this naturally sounds absurd since

53  
00:02:21,089 --> 00:02:18,220  
it's obvious I think that we live in a

54  
00:02:24,809 --> 00:02:21,099  
universe that's made of real real solid

55  
00:02:26,580 --> 00:02:24,819  
stuff information on the other hand has

56  
00:02:28,470 --> 00:02:26,590  
no physical existence I mean information

57  
00:02:31,020 --> 00:02:28,480  
where is it you can use it to make

58  
00:02:34,890 --> 00:02:31,030  
things build things but you can't hold

59  
00:02:36,330 --> 00:02:34,900  
information in your hand so what is the

60  
00:02:39,780 --> 00:02:36,340  
motivation for entertaining such not

61  
00:02:44,460 --> 00:02:39,790  
hypothesis as digital physics operating

62  
00:02:47,970 --> 00:02:44,470  
in an unreal world well there been some

63  
00:02:50,280 --> 00:02:47,980

new developments in electronics with

64

00:02:53,759 --> 00:02:50,290

respect to virtual reality on March the

65

00:02:56,940 --> 00:02:53,769

28th the oculus rift company launched a

66

00:02:58,500 --> 00:02:56,950

vision of a virtual reality system this

67

00:03:00,539 --> 00:02:58,510

debuted heralding the arrival with

68

00:03:02,430 --> 00:03:00,549

technology as seemingly comes around of

69

00:03:04,470 --> 00:03:02,440

science fiction but it's real I mean

70

00:03:05,550 --> 00:03:04,480

these goggles are now for sale and what

71

00:03:06,840 --> 00:03:05,560

will be for sale a year or two from now

72

00:03:10,559 --> 00:03:06,850

will be much more sophisticated I'm sure

73

00:03:12,270 --> 00:03:10,569

in fact this viewer here says I'm

74

00:03:15,059 --> 00:03:12,280

testing the oculus headset in a mountain

75

00:03:16,830 --> 00:03:15,069

climbing simulation the experience

76

00:03:20,280 --> 00:03:16,840

teleports me to a jagged cliff in a

77

00:03:22,410 --> 00:03:20,290

virtual world so realistic that I can

78

00:03:24,900 --> 00:03:22,420

barely look down when I do my knees

79

00:03:26,759 --> 00:03:24,910

buckle and my palm sweat and finally my

80

00:03:30,150 --> 00:03:26,769

brain has to interrupt and say dude

81

00:03:33,780 --> 00:03:30,160

you're not really here things can get

82

00:03:37,770 --> 00:03:33,790

very very interesting very quickly in

83

00:03:39,300 --> 00:03:37,780

this regime of digital reality Seth

84

00:03:41,220 --> 00:03:39,310

Lloyd a professor of mechanical

85

00:03:42,870 --> 00:03:41,230

engineering at MIT states that we could

86

00:03:46,069 --> 00:03:42,880

we could have the whole universe

87

00:03:49,440 --> 00:03:46,079

simulated in a computer in 600 years

88

00:03:51,360 --> 00:03:49,450

provided by the computational increasing

89  
00:03:54,330 --> 00:03:51,370  
power of Moore's law now Moore's law may

90  
00:03:56,490 --> 00:03:54,340  
or may not apply you know for another 50

91  
00:03:58,710 --> 00:03:56,500  
years 100 years but who cares I mean he

92  
00:03:59,789 --> 00:03:58,720  
said 600 somebody for 6,000 or even

93  
00:04:01,589 --> 00:03:59,799  
600,000 years

94  
00:04:02,789 --> 00:04:01,599  
who cares eventually we will get to a

95  
00:04:05,250 --> 00:04:02,799  
point where we will be able to simulate

96  
00:04:07,259 --> 00:04:05,260  
the entire universe somehow unless this

97  
00:04:08,670 --> 00:04:07,269  
whole approach is wrong well I'm going

98  
00:04:09,450 --> 00:04:08,680  
to take this approach and sort of take

99  
00:04:11,340 --> 00:04:09,460  
half of it go

100  
00:04:13,380 --> 00:04:11,350  
it happened to another and in the end

101

00:04:14,790 --> 00:04:13,390

provide you with something that will

102

00:04:17,220 --> 00:04:14,800

actually that will actually make it

103

00:04:19,170 --> 00:04:17,230

possible to reconcile a spiritual and

104

00:04:22,430 --> 00:04:19,180

spirit a spiritual and physical reality

105

00:04:25,200 --> 00:04:22,440

so stay in your seats

106

00:04:26,850 --> 00:04:25,210

all right well and from Lloyd's

107

00:04:28,500 --> 00:04:26,860

perspective everything that exists is

108

00:04:30,960 --> 00:04:28,510

the output of a university of the

109

00:04:38,160 --> 00:04:30,970

universe's computer as a computation for

110

00:04:39,360 --> 00:04:38,170

so perceives reality unfolds well what's

111

00:04:41,610 --> 00:04:39,370

the potential evidence for a virtual

112

00:04:42,870 --> 00:04:41,620

reality I'm not gonna go through all of

113

00:04:46,350 --> 00:04:42,880

these but let's talk about a few of them

114

00:04:48,540 --> 00:04:46,360

in a virtual reality you have the space

115

00:04:50,100 --> 00:04:48,550

and time governed by Planck length mass

116

00:04:51,930 --> 00:04:50,110

and time that's something really only

117

00:04:53,580 --> 00:04:51,940

physicists whatever appreciate so let me

118

00:04:55,740 --> 00:04:53,590

just say that this this is sort of a

119

00:04:57,630 --> 00:04:55,750

limit on how small something can be a

120

00:04:59,520 --> 00:04:57,640

massive it can be how fast it can go

121

00:05:00,840 --> 00:04:59,530

these are clock constants and they

122

00:05:02,340 --> 00:05:00,850

naturally would fall out of a simulation

123

00:05:04,290 --> 00:05:02,350

that's that's not that's digital a

124

00:05:06,390 --> 00:05:04,300

digital cannot computation would be able

125

00:05:08,340 --> 00:05:06,400

to generate these effects very easily or

126

00:05:10,230 --> 00:05:08,350

for example a maximum speed of light

127

00:05:12,360 --> 00:05:10,240

well maybe has to do with the processing

128

00:05:13,860 --> 00:05:12,370

power of some great Universal computer

129

00:05:16,680 --> 00:05:13,870

that's that's making all this seemingly

130

00:05:18,510 --> 00:05:16,690

real objects obvious only rendered when

131

00:05:20,730 --> 00:05:18,520

observed this takes us back to the old

132

00:05:22,620 --> 00:05:20,740

question of whether or not when if a

133

00:05:24,990 --> 00:05:22,630

tree falls in the forest does a same one

134

00:05:27,240 --> 00:05:25,000

hear it well in this view if there is a

135

00:05:31,170 --> 00:05:27,250

sentient being around that would be able

136

00:05:33,630 --> 00:05:31,180

to hear at the the the but be able to

137

00:05:35,700 --> 00:05:33,640

see or hear the happening then that

138

00:05:37,410 --> 00:05:35,710

would basically show up but the rest

139

00:05:39,240 --> 00:05:37,420

would stay within a database sort of

140

00:05:41,220 --> 00:05:39,250

unresolved database until it's needed

141

00:05:43,920 --> 00:05:41,230

and so you can actually save a lot of

142

00:05:46,560 --> 00:05:43,930

computing time and increase your

143

00:05:48,390 --> 00:05:46,570

bandwidth tremendously if you program

144

00:05:51,930 --> 00:05:48,400

things that only render reality rather

145

00:05:53,820 --> 00:05:51,940

than then amount to every most of every

146

00:05:55,530 --> 00:05:53,830

single atom and molecule and quark and

147

00:05:56,460 --> 00:05:55,540

whatever that that we think makes up

148

00:05:58,830 --> 00:05:56,470

matter real matter

149

00:06:00,240 --> 00:05:58,840

the cosmic beginning the book the Big

150

00:06:02,460 --> 00:06:00,250

Bang would be sort of like booting up a

151  
00:06:04,440 --> 00:06:02,470  
system well where did that come from

152  
00:06:06,660 --> 00:06:04,450  
well from some other system on which you

153  
00:06:10,380 --> 00:06:06,670  
booted up this universe it sounds pretty

154  
00:06:11,790 --> 00:06:10,390  
uh pretty extreme so far but let's bear

155  
00:06:12,990 --> 00:06:11,800  
with me I think there's a convenient

156  
00:06:16,650 --> 00:06:13,000  
make more and more sense at least to me

157  
00:06:18,240 --> 00:06:16,660  
as I ponder these things ready

158  
00:06:20,340 --> 00:06:18,250  
explanation of quantum entanglement

159  
00:06:21,690 --> 00:06:20,350  
well if you have particles say electrons

160  
00:06:23,159 --> 00:06:21,700  
rushing apart from each other because

161  
00:06:26,459 --> 00:06:23,169  
they've been created and in some

162  
00:06:28,040 --> 00:06:26,469  
so that their their powers of their spin

163  
00:06:31,019 --> 00:06:28,050

say or something like that are are

164

00:06:33,510 --> 00:06:31,029

correlated then we wonder how the action

165

00:06:34,589 --> 00:06:33,520

of one that we might take up here by

166

00:06:36,149 --> 00:06:34,599

virtue of some measurement could

167

00:06:38,369 --> 00:06:36,159

influence its partner over here which is

168

00:06:40,769 --> 00:06:38,379

maybe by this time many light-years away

169

00:06:42,029 --> 00:06:40,779

how can you possibly interact well it's

170

00:06:43,709 --> 00:06:42,039

not a problem if they're both being

171

00:06:45,330 --> 00:06:43,719

generated inside a computer they're not

172

00:06:46,320 --> 00:06:45,340

physically located this far apart it's

173

00:06:48,929 --> 00:06:46,330

just the game that's being played

174

00:06:51,269 --> 00:06:48,939

decided yeah the Xbox and so it's

175

00:06:53,719 --> 00:06:51,279

something like the explanation of

176  
00:06:55,559 --> 00:06:53,729  
quantum entanglement it becomes trivial

177  
00:06:56,640 --> 00:06:55,569  
and now we'll go through the rest of the

178  
00:06:58,709 --> 00:06:56,650  
minute there other things that are

179  
00:07:00,239 --> 00:06:58,719  
really easy to explain digitally but a

180  
00:07:01,409 --> 00:07:00,249  
really damn hard to explain if you want

181  
00:07:03,089 --> 00:07:01,419  
to have a system that's that's totally

182  
00:07:06,149 --> 00:07:03,099  
analog that that does what it seemingly

183  
00:07:07,559 --> 00:07:06,159  
does and human affairs in this view we

184  
00:07:09,300 --> 00:07:07,569  
did not actually here said here's the

185  
00:07:12,179 --> 00:07:09,310  
bug boom here's the here's the bad

186  
00:07:13,769 --> 00:07:12,189  
downside of that approach in this view

187  
00:07:15,869 --> 00:07:13,779  
we do not actually exist

188  
00:07:18,570 --> 00:07:15,879

other than as algorithms in the computer

189

00:07:21,390 --> 00:07:18,580

so in this view which is beginning to be

190

00:07:23,459 --> 00:07:21,400

taken seriously by scientists we are

191

00:07:25,619 --> 00:07:23,469

really not us and we are not physical

192

00:07:28,709 --> 00:07:25,629

beings in fact we're not beings all we

193

00:07:30,329 --> 00:07:28,719

are somehow created in someone's virtual

194

00:07:32,010 --> 00:07:30,339

reality played on is a super vast

195

00:07:34,050 --> 00:07:32,020

computer someplace and if he shuts us

196

00:07:36,990 --> 00:07:34,060

down or or there's a crash the computer

197

00:07:38,279 --> 00:07:37,000

crashes we are dead now I don't like

198

00:07:40,290 --> 00:07:38,289

this view one bit and I don't think that

199

00:07:42,089 --> 00:07:40,300

I would not want to have a theory of

200

00:07:44,939 --> 00:07:42,099

reality based on that and I don't think

201  
00:07:47,490 --> 00:07:44,949  
you have to the theory I'm going to

202  
00:07:51,300 --> 00:07:47,500  
present is based on the following that

203  
00:07:54,540 --> 00:07:51,310  
consciousness is not castas not viewed

204  
00:07:56,459 --> 00:07:54,550  
primarily as of agree that sentence

205  
00:07:58,019 --> 00:07:56,469  
again conscious does not as primary but

206  
00:07:59,999 --> 00:07:58,029  
as a soul Constitution of our universe

207  
00:08:02,399 --> 00:08:00,009  
another possible reality so I'm saying

208  
00:08:04,709 --> 00:08:02,409  
that the only thing that exists both

209  
00:08:06,360 --> 00:08:04,719  
here and everywhere everywhere at all

210  
00:08:08,700 --> 00:08:06,370  
and even in some of the universe is

211  
00:08:10,429 --> 00:08:08,710  
consciousness the conscious is the basis

212  
00:08:12,510 --> 00:08:10,439  
of everything the creator of everything

213  
00:08:14,459 --> 00:08:12,520

including what we view around us isn't

214

00:08:17,820 --> 00:08:14,469

the reality that we live in everyday and

215

00:08:19,679 --> 00:08:17,830

I'm applying the or I'm proposing to

216

00:08:22,260 --> 00:08:19,689

accept the existence of a vast

217

00:08:24,689 --> 00:08:22,270

transcendent consciousness and that our

218

00:08:27,269 --> 00:08:24,699

true nature as beings of consciousness

219

00:08:28,529 --> 00:08:27,279

exists we are not just algorithms in

220

00:08:30,510 --> 00:08:28,539

some computer we are beings of

221

00:08:33,889 --> 00:08:30,520

consciousness serve likely the flames

222

00:08:36,480 --> 00:08:33,899

off the bonfire we are we are the the

223

00:08:36,990 --> 00:08:36,490

incarnations of the consciousness in

224

00:08:39,659 --> 00:08:37,000

this universe

225

00:08:41,700 --> 00:08:39,669

exploring its virtual reality so this is

226

00:08:47,970 --> 00:08:41,710

a lot better picture of us than that of

227

00:08:49,110 --> 00:08:47,980

merely being computer algorithms so what

228

00:08:51,420 --> 00:08:49,120

are the seven differences between these

229

00:08:52,830 --> 00:08:51,430

two points of view well the first one

230

00:08:55,140 --> 00:08:52,840

postulates an inanimate digital

231

00:08:57,990 --> 00:08:55,150

supercomputer scaled up by ten to the

232

00:08:59,910 --> 00:08:58,000

nth power Ranke me 100 200 whatever some

233

00:09:01,860 --> 00:08:59,920

huge power you know we're not limited

234

00:09:03,780 --> 00:09:01,870

well we are limited but in the far

235

00:09:05,640 --> 00:09:03,790

future who knows how limited will be not

236

00:09:08,010 --> 00:09:05,650

nearly isn't very much compared to today

237

00:09:10,710 --> 00:09:08,020

so if we scale up a supercomputer by

238

00:09:12,150 --> 00:09:10,720

about a factor of 10 to the 20 10 to 110

239

00:09:13,860 --> 00:09:12,160  
to 200 you know we will have the

240

00:09:15,600 --> 00:09:13,870  
capabilities that Seth Lloyd predicted

241

00:09:16,890 --> 00:09:15,610  
we would have within 600 years even if

242

00:09:19,680 --> 00:09:16,900  
it's six thousand years before this

243

00:09:21,390 --> 00:09:19,690  
happens to happen whereas consciousness

244

00:09:23,190 --> 00:09:21,400  
chooses to act like a computer now

245

00:09:24,840 --> 00:09:23,200  
here's what I'm saying in that regard

246

00:09:26,310 --> 00:09:24,850  
I think I could pretend to be a computer

247

00:09:27,420 --> 00:09:26,320  
and I could write myself a little

248

00:09:29,760 --> 00:09:27,430  
algorithm it says okay

249

00:09:32,370 --> 00:09:29,770  
if n equals blah blah blah x equals blah

250

00:09:34,230 --> 00:09:32,380  
blah blah etc do loop okay now I could

251  
00:09:36,180 --> 00:09:34,240  
sit there if I wanted to all day long

252  
00:09:36,810 --> 00:09:36,190  
and stare at that well okay N equals 1

253  
00:09:38,970 --> 00:09:36,820  
fine

254  
00:09:40,620 --> 00:09:38,980  
and equals to find N equals 2 me I get

255  
00:09:42,690 --> 00:09:40,630  
in my head there only to be something do

256  
00:09:44,370 --> 00:09:42,700  
something really crazy I could act like

257  
00:09:53,749 --> 00:09:44,380  
a computer and you know have my own

258  
00:10:00,329 --> 00:09:56,699  
acting like a computer well if you have

259  
00:10:01,859 --> 00:10:00,339  
a very consciousness that is tending to

260  
00:10:04,410 --> 00:10:01,869  
the how many orders of magnitude beyond

261  
00:10:05,939 --> 00:10:04,420  
us then what's to prevent that being

262  
00:10:08,099 --> 00:10:05,949  
from doing that this sort of thing and

263  
00:10:10,979 --> 00:10:08,109

imagining a world that consists of that

264

00:10:13,470 --> 00:10:10,989

kind of virtual simulation like this is

265

00:10:17,329 --> 00:10:13,480

the Maya that the ancient ancient

266

00:10:20,069 --> 00:10:17,339

Indians talked about in the scriptures

267

00:10:22,769 --> 00:10:20,079

the supercomputer of course operates the

268

00:10:25,349 --> 00:10:22,779

electronics the consciousness computer

269

00:10:28,019 --> 00:10:25,359

or the consciousness being acting like a

270

00:10:29,999 --> 00:10:28,029

computer would have highly structured

271

00:10:32,819 --> 00:10:30,009

thoughts so I would see these thoughts

272

00:10:35,699 --> 00:10:32,829

as being likely or rather I would see

273

00:10:37,979 --> 00:10:35,709

the the conscience is being like the the

274

00:10:39,989 --> 00:10:37,989

hardware and the thoughts of software

275

00:10:42,329 --> 00:10:39,999

and this is this is how the Maya game is

276

00:10:45,090 --> 00:10:42,339

played in the in the era of virtual

277

00:10:47,220 --> 00:10:45,100

reality our existence and environment is

278

00:10:49,079 --> 00:10:47,230

an illusion created by operation of the

279

00:10:51,239 --> 00:10:49,089

supercomputer so again we're algorithms

280

00:10:53,460 --> 00:10:51,249

are not people were nothing but but

281

00:10:55,259 --> 00:10:53,470

algorithms and our the other view of

282

00:10:56,249 --> 00:10:55,269

consciousness is that our existence is

283

00:10:57,720 --> 00:10:56,259

100% real

284

00:10:59,460 --> 00:10:57,730

but it's offspring of a super

285

00:11:05,789 --> 00:10:59,470

consciousness our environment to the

286

00:11:07,889 --> 00:11:05,799

simulation by the way this would be also

287

00:11:09,419 --> 00:11:07,899

useful for explaining a paranormal

288

00:11:10,679 --> 00:11:09,429

phenomenon I don't get into that very

289

00:11:13,319 --> 00:11:10,689

much mrs. revenue a joint meeting of

290

00:11:14,999 --> 00:11:13,329

Ssempe it's worth pointing out that this

291

00:11:17,609 --> 00:11:15,009

approach would as if some of these could

292

00:11:19,169 --> 00:11:17,619

be questions in paranormal physics in

293

00:11:20,729 --> 00:11:19,179

action might as well say that they're

294

00:11:22,379 --> 00:11:20,739

puzzling now things like entanglement

295

00:11:23,699 --> 00:11:22,389

and the role of the observer in

296

00:11:25,889 --> 00:11:23,709

measurement that being Radin talked

297

00:11:27,449 --> 00:11:25,899

about this morning all these things can

298

00:11:30,090 --> 00:11:27,459

be easily explained if we assume that

299

00:11:31,169 --> 00:11:30,100

there's a great consciousness using part

300

00:11:31,859 --> 00:11:31,179

of itself they've been a really tiny

301

00:11:33,720 --> 00:11:31,869

part of itself

302

00:11:35,519 --> 00:11:33,730

they're calculating all this stuff for

303

00:11:36,809 --> 00:11:35,529

billions of years to make this virtual

304

00:11:38,579 --> 00:11:36,819

or universe that we live in and we were

305

00:11:40,439 --> 00:11:38,589

enjoying right now sitting here and the

306

00:11:46,679 --> 00:11:40,449

heat being very uncomfortable in heat

307

00:11:48,720 --> 00:11:46,689

let's need to be well never mind now is

308

00:11:52,259 --> 00:11:48,730

there any evidence for this this gets a

309

00:11:53,519 --> 00:11:52,269

little bit scarce but there is there is

310

00:11:55,289 --> 00:11:53,529

some evidence and I'll just pointed out

311

00:11:56,909 --> 00:11:55,299

to you need to use your own judgment if

312

00:11:58,319 --> 00:11:56,919

you get this book by this book by this

313

00:12:00,389 --> 00:11:58,329

physicist and see what you think for

314

00:12:03,329 --> 00:12:00,399

yourself it's called my big toe which

315

00:12:05,039 --> 00:12:03,339

means my big theory of everything his

316

00:12:06,350 --> 00:12:05,049

attempt to be clever anyway sort of

317

00:12:08,690 --> 00:12:06,360

clever and I like Tom

318

00:12:10,160 --> 00:12:08,700

but he is a it was one of the first

319

00:12:12,829 --> 00:12:10,170

researchers working with Robert and roll

320

00:12:15,410 --> 00:12:12,839

at the Institute and but in Virginia

321

00:12:16,910 --> 00:12:15,420

back in the 1970s already he the

322

00:12:19,340 --> 00:12:16,920

physicist a physicist by training is

323

00:12:21,560 --> 00:12:19,350

done a lot of consulting for NASA very

324

00:12:23,060 --> 00:12:21,570

nice guy very smart guy and he's done

325

00:12:25,880 --> 00:12:23,070

hundreds of out-of-body experiences he

326

00:12:27,290 --> 00:12:25,890

says since the 1970s and what he says is

327

00:12:30,800 --> 00:12:27,300

that he's visited some of these other

328

00:12:32,090 --> 00:12:30,810

realities now you know I'm kind of

329

00:12:35,030 --> 00:12:32,100

skeptical about that but on the other

330

00:12:37,220 --> 00:12:35,040

hand viewing this says the reality that

331

00:12:38,840 --> 00:12:37,230

then I'm proposing it's not crazy I mean

332

00:12:40,400 --> 00:12:38,850

it fits into the scheme of things that

333

00:12:42,800 --> 00:12:40,410

I'm proposing to today you might not

334

00:12:44,600 --> 00:12:42,810

want except this may be yeah until you

335

00:12:45,680 --> 00:12:44,610

think about some more for a while but

336

00:12:48,500 --> 00:12:45,690

it's very consistent with what I'm

337

00:12:50,360 --> 00:12:48,510

saying so take them at least please put

338

00:12:52,310 --> 00:12:50,370

them back your minds it may be that the

339

00:12:54,769 --> 00:12:52,320

tom has seen some of the stuff and what

340

00:12:57,139 --> 00:12:54,779

he's done is reported back what the what

341

00:12:59,540 --> 00:12:57,149

the landscape looks like and this in

342

00:13:01,670 --> 00:12:59,550

fact is what is cosmocrats Majin he is

343

00:13:03,050 --> 00:13:01,680

he basically sees worlds within worlds

344

00:13:04,940 --> 00:13:03,060

within worlds within worlds and again

345

00:13:07,009 --> 00:13:04,950

this is not not a new concept needs a

346

00:13:09,380 --> 00:13:07,019

thousand years old but that's sort of

347

00:13:10,550 --> 00:13:09,390

the reality that he sees and there are

348

00:13:12,980 --> 00:13:10,560

sort of universes that are at the same

349

00:13:14,210 --> 00:13:12,990

level as our universe again matter

350

00:13:15,319 --> 00:13:14,220

modern astronomy wouldn't have anything

351

00:13:17,120 --> 00:13:15,329

to quarrel with any modern astronomy

352

00:13:19,430 --> 00:13:17,130

postulates possibly millions of

353

00:13:20,660 --> 00:13:19,440

universes and I'm astronomer and I'm

354

00:13:23,389 --> 00:13:20,670

telling you that well repost rating in

355

00:13:26,360 --> 00:13:23,399

astronomy is in some sense as outrageous

356

00:13:28,400 --> 00:13:26,370

as this but already postulate is that

357

00:13:30,620 --> 00:13:28,410

you have hierarchies and worlds and that

358

00:13:32,269 --> 00:13:30,630

everything in a given reality when you

359

00:13:34,009 --> 00:13:32,279

ask for its origin you have two secrets

360

00:13:36,139 --> 00:13:34,019

origin in a higher level of reality and

361

00:13:37,759 --> 00:13:36,149

so the Big Bang which into created our

362

00:13:39,170 --> 00:13:37,769

universe where did that how is that

363

00:13:39,860 --> 00:13:39,180

initiated where did that come from was

364

00:13:41,960 --> 00:13:39,870

the cause of it

365

00:13:43,850 --> 00:13:41,970

and Tom's you it was from the next

366

00:13:46,509 --> 00:13:43,860

higher level that caused that there's

367

00:13:48,259 --> 00:13:46,519

even the one thing you cannot explain

368

00:13:49,939 --> 00:13:48,269

self consistently within a given

369

00:13:51,500 --> 00:13:49,949

universe is where it came from because

370

00:13:53,300 --> 00:13:51,510

you always need some first cause that

371

00:13:54,920 --> 00:13:53,310

comes from somewhere else that is in a

372

00:13:56,269 --> 00:13:54,930

sense more potent and I don't think

373

00:13:57,620 --> 00:13:56,279

there's any getting around that I think

374

00:13:59,180 --> 00:13:57,630

that's a hairstylist first cause that we

375

00:14:00,710 --> 00:13:59,190

simply have to live with and so at some

376

00:14:02,750 --> 00:14:00,720

level this thing this goes on until it

377

00:14:04,400 --> 00:14:02,760

reaches the ladder goes on until it

378

00:14:06,230 --> 00:14:04,410

reaches the transcendent consciousness

379

00:14:07,759 --> 00:14:06,240

that is everything at that point we just

380

00:14:09,860 --> 00:14:07,769

throw up her head and say look you know

381

00:14:11,389 --> 00:14:09,870

this is beyond space beyond time beyond

382

00:14:12,769 --> 00:14:11,399

my imagination you know I cannot

383

00:14:14,329 --> 00:14:12,779

understand this I'm not gonna worry

384

00:14:15,920 --> 00:14:14,339

about it at least until the perhaps I

385

00:14:18,110 --> 00:14:15,930

you know take part in this for billion

386

00:14:23,300 --> 00:14:18,120

years and my spirit Rises to

387

00:14:24,470 --> 00:14:23,310

be worthy of obtaining this knowledge so

388

00:14:26,480 --> 00:14:24,480

what would the ultimate purpose of this

389

00:14:28,579 --> 00:14:26,490

know I've given you an outline of what

390

00:14:30,290 --> 00:14:28,589

this might all consist of is this view

391

00:14:32,210 --> 00:14:30,300

of reality but what's the purpose of it

392

00:14:37,700 --> 00:14:32,220

why why I do it

393

00:14:39,140 --> 00:14:37,710

well Tom says and I agree for a one and

394

00:14:40,430 --> 00:14:39,150

only transient consciousness to

395

00:14:42,950 --> 00:14:40,440

experience this potential and thereby

396

00:14:46,280 --> 00:14:42,960

evolve itself now if you're the one and

397

00:14:48,590 --> 00:14:46,290

only infinite being and you want to know

398

00:14:51,410 --> 00:14:48,600

what you really are like what kind of

399

00:14:52,730 --> 00:14:51,420

metal you have what kind of yeah knowing

400

00:14:54,440 --> 00:14:52,740

yourself you would have to have

401  
00:14:56,810 --> 00:14:54,450  
something external to refer yourself to

402  
00:14:58,850 --> 00:14:56,820  
but if you're all of it is and nothing

403  
00:15:00,710 --> 00:14:58,860  
else but you can exist you can still

404  
00:15:03,980 --> 00:15:00,720  
kind of play this game by setting aside

405  
00:15:05,810 --> 00:15:03,990  
some of yourself as a renown which in a

406  
00:15:09,680 --> 00:15:05,820  
virtual world can be created and then

407  
00:15:12,590 --> 00:15:09,690  
you can enter into it so Campbell uses

408  
00:15:14,390 --> 00:15:12,600  
has a source of decreasing entropy I say

409  
00:15:19,100 --> 00:15:14,400  
simply this is a way of evolving itself

410  
00:15:20,360 --> 00:15:19,110  
for a system that I'm proposing yeah it

411  
00:15:21,800 --> 00:15:20,370  
helps to know that there are other

412  
00:15:23,930 --> 00:15:21,810  
astronomers who thought similar thoughts

413  
00:15:25,550 --> 00:15:23,940

may not not not Victor virtual realities

414

00:15:27,530 --> 00:15:25,560

but thoughts at the universe's of ask

415

00:15:29,090 --> 00:15:27,540

computers or dreams genes he talks about

416

00:15:30,230 --> 00:15:29,100

my no longer appearing as an accidental

417

00:15:32,240 --> 00:15:30,240

intruder into the realm of matter

418

00:15:33,769 --> 00:15:32,250

without rather Hamlet as a creator

419

00:15:35,420 --> 00:15:33,779

governor of the realm of matter and so

420

00:15:37,519 --> 00:15:35,430

he saw the mental universe as being that

421

00:15:40,190 --> 00:15:37,529

the basic universe not matter but mental

422

00:15:41,810 --> 00:15:40,200

universe and no favorite of mine Sir

423

00:15:44,570 --> 00:15:41,820

Arthur Eddington the one who made

424

00:15:46,699 --> 00:15:44,580

Einstein famous by by measuring the the

425

00:15:48,680 --> 00:15:46,709

curvature of space in 1919 here the

426

00:15:50,810 --> 00:15:48,690

Arcadian nine Stein's garden and I think

427

00:15:53,660 --> 00:15:50,820

it's Eddie his garden and Eddington also

428

00:15:56,150 --> 00:15:53,670

had belief in other realms for example

429

00:15:58,130 --> 00:15:56,160

he wrote a book called me science in the

430

00:15:59,060 --> 00:15:58,140

unseen world and on the other hand on

431

00:16:00,890 --> 00:15:59,070

the right hand side there's the

432

00:16:02,120 --> 00:16:00,900

mathematically relativity he took

433

00:16:03,920 --> 00:16:02,130

Einsteins general relativity made the

434

00:16:06,620 --> 00:16:03,930

first textbook out of it and this is

435

00:16:07,760 --> 00:16:06,630

1965 edition and that was my textbook I

436

00:16:10,670 --> 00:16:07,770

used that when I was in graduate school

437

00:16:13,579 --> 00:16:10,680

and it was a full of cancer calculus

438

00:16:15,260 --> 00:16:13,589

believe me it was it was a slog but this

439

00:16:17,300 --> 00:16:15,270

goes to show you how brilliant Eddington

440

00:16:18,350 --> 00:16:17,310

was I mean he was a real genius well

441

00:16:20,140 --> 00:16:18,360

I've been signaled that we got maybe

442

00:16:22,400 --> 00:16:20,150

five minutes left

443

00:16:25,670 --> 00:16:22,410

three minutes well let's see waiting or

444

00:16:27,670 --> 00:16:25,680

two so the physical world is real and

445

00:16:30,060 --> 00:16:27,680

all there is that's the usual

446

00:16:31,900 --> 00:16:30,070

usually we get in mainstream science

447

00:16:33,850 --> 00:16:31,910

physical world is real but other

448

00:16:35,050 --> 00:16:33,860

realities exist what's improvement but

449

00:16:37,870 --> 00:16:35,060

it's still possible is two different

450

00:16:39,490 --> 00:16:37,880

things a world of matter and a world of

451  
00:16:42,490 --> 00:16:39,500  
consciousness probably those being the

452  
00:16:43,750 --> 00:16:42,500  
two things but maybe it's maybe this

453  
00:16:45,550 --> 00:16:43,760  
creation of matter it's really quite an

454  
00:16:47,920 --> 00:16:45,560  
illusion because how do you make how do

455  
00:16:49,870 --> 00:16:47,930  
you make things solid and stable and

456  
00:16:51,639 --> 00:16:49,880  
silent inconsistent with the view of a

457  
00:16:54,190 --> 00:16:51,649  
continuous reality that we want to live

458  
00:16:56,260 --> 00:16:54,200  
in and so it may not be necessary to

459  
00:16:57,820 --> 00:16:56,270  
actually create a physical world if you

460  
00:16:59,380 --> 00:16:57,830  
simulate it well enough that's all you

461  
00:17:01,150 --> 00:16:59,390  
need because then you can create pretend

462  
00:17:03,250 --> 00:17:01,160  
that it's real everything you would do

463  
00:17:05,140 --> 00:17:03,260

in everyday order your life that's as it

464

00:17:06,250 --> 00:17:05,150

were real and you don't need to create

465

00:17:07,960 --> 00:17:06,260

do something that may be logically

466

00:17:09,610 --> 00:17:07,970

impossible I mean logically impossible

467

00:17:11,799 --> 00:17:09,620

they have atoms and molecules that do

468

00:17:13,689 --> 00:17:11,809

the things that they do they do things

469

00:17:15,069 --> 00:17:13,699

that they do on the macroscopic scale

470

00:17:16,540 --> 00:17:15,079

but on the quantum scale they do weird

471

00:17:18,130 --> 00:17:16,550

things because the physics and we're

472

00:17:20,980 --> 00:17:18,140

down there and because that's where

473

00:17:23,380 --> 00:17:20,990

these discretization zuv quantizations

474

00:17:26,620 --> 00:17:23,390

of space-time we're they're not learn

475

00:17:28,419 --> 00:17:26,630

probably not to ugly heads so let's see

476

00:17:30,130 --> 00:17:28,429

what I have here the third possibility

477

00:17:32,590 --> 00:17:30,140

physical world is a technology based

478

00:17:34,180 --> 00:17:32,600

simulation so are we it says so are we

479

00:17:36,070 --> 00:17:34,190

business at the bottom that really gets

480

00:17:39,760 --> 00:17:36,080

my ire no I don't believe in the

481

00:17:41,049 --> 00:17:39,770

simulation and the idea that you're

482

00:17:43,510 --> 00:17:41,059

living in a computer simulation almost

483

00:17:46,480 --> 00:17:43,520

raised by Nick Bostrom this was a fair

484

00:17:49,000 --> 00:17:46,490

other famous philosophical hardly harder

485

00:17:50,770 --> 00:17:49,010

philosophical paper that came out a few

486

00:17:52,360 --> 00:17:50,780

years ago a lot of publicity a lot of

487

00:17:55,630 --> 00:17:52,370

people are thinking about the virtual

488

00:17:57,280 --> 00:17:55,640

reality so I'm not going to go much

489

00:17:59,350 --> 00:17:57,290

further except to point out that the

490

00:18:00,970 --> 00:17:59,360

last possibility of this set of

491

00:18:03,160 --> 00:18:00,980

possibilities for what what the heck is

492

00:18:04,180 --> 00:18:03,170

this all about is that the physical

493

00:18:06,370 --> 00:18:04,190

world is a consciousness based

494

00:18:08,830 --> 00:18:06,380

simulation and constants is all there is

495

00:18:14,020 --> 00:18:08,840

and includes us let me find if I can one

496

00:18:20,020 --> 00:18:14,030

more beautiful oh I can't miss this one

497

00:18:24,460 --> 00:18:22,330

well okay I went too fast and I'm a

498

00:18:26,710 --> 00:18:24,470

computer bump I guess anyway that's the

499

00:18:29,440 --> 00:18:26,720

that's my view at least a beginning

500

00:18:31,660 --> 00:18:29,450

outline the rough basis of a theory of

501  
00:18:33,070 --> 00:18:31,670  
everything that keeps all the physics as

502  
00:18:35,110 --> 00:18:33,080  
it is I mean we explore the physical

503  
00:18:37,300 --> 00:18:35,120  
world just as we always do but we

504  
00:18:39,460 --> 00:18:37,310  
ourselves you know our rear beings of

505  
00:18:41,170 --> 00:18:39,470  
consciousness and to understand what

506  
00:18:42,550 --> 00:18:41,180  
that is it's a mistake to look elsewhere

507  
00:18:43,750 --> 00:18:42,560  
for this generation that comes from

508  
00:18:45,730 --> 00:18:43,760  
within us because that's what we are

509  
00:18:48,880 --> 00:18:45,740  
look no further conscious of what we are

510  
00:18:51,940 --> 00:18:48,890  
and all that is in my view anyway enough

511  
00:19:06,280 --> 00:18:51,950  
initely blabbing I'm open to questions

512  
00:19:11,730 --> 00:19:06,290  
oh okay as usual we'll be asking people

513  
00:19:16,690 --> 00:19:14,140

Bernie I've got your book and I've heard

514

00:19:19,960 --> 00:19:16,700

you before and I must say I'm attracted

515

00:19:22,150 --> 00:19:19,970

to your hypothesis are you familiar with

516

00:19:25,090 --> 00:19:22,160

Robert Lansing and his book biocentrism

517

00:19:27,130 --> 00:19:25,100

very similar so you've read that the

518

00:19:29,350 --> 00:19:27,140

only thing is how do you get past the

519

00:19:34,660 --> 00:19:29,360

argument or the philosophical difficulty

520

00:19:35,890 --> 00:19:34,670

of solipsism and the in other minds it

521

00:19:38,050 --> 00:19:35,900

sounds like you're talking about just

522

00:19:40,210 --> 00:19:38,060

one mind which your mind might be the

523

00:19:42,310 --> 00:19:40,220

only one or mind might be the only one

524

00:19:44,500 --> 00:19:42,320

so what about other minds well I think

525

00:19:46,330 --> 00:19:44,510

there's a high the way I see it is that

526

00:19:48,330 --> 00:19:46,340

there's a huge interim there's a vast

527

00:19:51,250 --> 00:19:48,340

infinite maybe I need infinite unbounded

528

00:19:53,170 --> 00:19:51,260

transcendent mine one mine notice this

529

00:19:54,490 --> 00:19:53,180

one mine could get lonely I don't know

530

00:19:58,150 --> 00:19:54,500

if I ever get lonely but it's kind of

531

00:20:00,370 --> 00:19:58,160

with one one one conscious only you

532

00:20:03,220 --> 00:20:00,380

can't really explore yourself so I think

533

00:20:06,520 --> 00:20:03,230

that what this entity does is to create

534

00:20:09,550 --> 00:20:06,530

universes using mathematics because I

535

00:20:11,680 --> 00:20:09,560

think the mathematics 99 capabilities of

536

00:20:14,800 --> 00:20:11,690

this being you know would be pretty

537

00:20:17,770 --> 00:20:14,810

evident but then sends into that was

538

00:20:19,570 --> 00:20:17,780

realities consciousness streams that are

539

00:20:20,860 --> 00:20:19,580

you and me in the you know the the trees

540

00:20:23,500 --> 00:20:20,870

in the forest and the alien somewhere

541

00:20:25,780 --> 00:20:23,510

else all living things would then simply

542

00:20:28,090 --> 00:20:25,790

be consciousness embedded in a virtual

543

00:20:30,070 --> 00:20:28,100

reality that would then do the things

544

00:20:32,020 --> 00:20:30,080

that you can in that reality it would

545

00:20:33,039 --> 00:20:32,030

are bad and kind of develop even an

546

00:20:35,350 --> 00:20:33,049

ethics

547

00:20:36,759 --> 00:20:35,360

morality by virtue of the behavior that

548

00:20:38,409 --> 00:20:36,769

you would have and we're doing right now

549

00:20:41,229 --> 00:20:38,419

is without even recognizing what we are

550

00:20:42,639 --> 00:20:41,239

and so there lots of billions of

551  
00:20:44,109 --> 00:20:42,649  
twenties of other entities out there

552  
00:20:48,609 --> 00:20:44,119  
that are the other beings that we

553  
00:20:50,320 --> 00:20:48,619  
interact with that's the view Bernie as

554  
00:20:53,049 --> 00:20:50,330  
the physicist I've always relished the

555  
00:20:55,269 --> 00:20:53,059  
equations that help me and get things

556  
00:20:56,919 --> 00:20:55,279  
built but when I joined the SS II I

557  
00:20:59,769 --> 00:20:56,929  
found out that there was a consciousness

558  
00:21:01,720 --> 00:20:59,779  
that was a reality and I've always

559  
00:21:05,560 --> 00:21:01,730  
wondered how do you start to get some

560  
00:21:07,869 --> 00:21:05,570  
equations that are helpful to use in in

561  
00:21:09,849 --> 00:21:07,879  
consciousness no you have basically said

562  
00:21:11,379 --> 00:21:09,859  
there's nothing but consciousness you do

563  
00:21:13,930 --> 00:21:11,389

all the equations we've been using as

564

00:21:15,519 --> 00:21:13,940

physicists somehow go away no I think

565

00:21:17,739 --> 00:21:15,529

there's a very universal laws that apply

566

00:21:18,729 --> 00:21:17,749

to each and every universe so it may be

567

00:21:20,229 --> 00:21:18,739

they may be different for universe

568

00:21:21,399 --> 00:21:20,239

University but that again is not a

569

00:21:22,479 --> 00:21:21,409

consciousness statement that's something

570

00:21:24,999 --> 00:21:22,489

if I were addressing in astronomy

571

00:21:27,279 --> 00:21:25,009

audience which I have done - and I said

572

00:21:28,539 --> 00:21:27,289

there are probably hundreds of thousands

573

00:21:29,919 --> 00:21:28,549

of other universes being created every

574

00:21:32,320 --> 00:21:29,929

second and they all have different

575

00:21:34,479 --> 00:21:32,330

properties I'd be ok I mean that's

576

00:21:36,549 --> 00:21:34,489

that's pretty much a speculative but ok

577

00:21:41,169 --> 00:21:36,559

astronomy now for the same thing applies

578

00:21:43,359 --> 00:21:41,179

here ok first like to say I

579

00:21:45,399 --> 00:21:43,369

fundamentally agree with the perspective

580

00:21:48,279 --> 00:21:45,409

that you're taking I think it's very

581

00:21:49,989 --> 00:21:48,289

interesting approach where I think it's

582

00:21:51,389 --> 00:21:49,999

challenging in and I think it's a

583

00:21:55,259 --> 00:21:51,399

challenge for anyone that's trying to

584

00:21:58,710 --> 00:21:55,269

put this in linguistic terms is that

585

00:22:02,560 --> 00:21:58,720

when you couch it in terms of simulation

586

00:22:04,869 --> 00:22:02,570

simulation of what what is it simulating

587

00:22:06,879 --> 00:22:04,879

right if it's not real there's not a

588

00:22:11,099 --> 00:22:06,889

fundamental physical reality to simulate

589

00:22:13,810 --> 00:22:11,109

or to mimic right and I think this is a

590

00:22:15,639 --> 00:22:13,820

language barrier thing than anything but

591

00:22:17,289 --> 00:22:15,649

I think some of these problems you talk

592

00:22:20,560 --> 00:22:17,299

about illusion or simulation these come

593

00:22:22,840 --> 00:22:20,570

from being embodied in this physical 3d

594

00:22:25,389 --> 00:22:22,850

reality and trying to extrapolate what

595

00:22:26,889 --> 00:22:25,399

we know about 3d reality to explain that

596

00:22:28,180 --> 00:22:26,899

higher dimensional reality that you're

597

00:22:30,369 --> 00:22:28,190

talking about that's right and the

598

00:22:31,570 --> 00:22:30,379

problem is is is you talk to people that

599

00:22:33,759 --> 00:22:31,580

have had these kind of cosmic

600

00:22:35,320 --> 00:22:33,769

consciousness experiences even beyond

601  
00:22:39,099 --> 00:22:35,330  
like your typical out-of-body experience

602  
00:22:41,169 --> 00:22:39,109  
where you really do have that one mind

603  
00:22:42,639 --> 00:22:41,179  
experience where there is no temporal

604  
00:22:46,180 --> 00:22:42,649  
reality and your interconnect with all

605  
00:22:46,930 --> 00:22:46,190  
things it's completely ineffable and to

606  
00:22:48,700 --> 00:22:46,940  
try to come back

607  
00:22:50,200 --> 00:22:48,710  
and then codify that in a system that

608  
00:22:51,820 --> 00:22:50,210  
you can then convey to someone else

609  
00:22:53,710 --> 00:22:51,830  
using language is a very very big

610  
00:22:55,390 --> 00:22:53,720  
challenge and I don't know really the

611  
00:22:56,740 --> 00:22:55,400  
best approach to do it other than for

612  
00:22:58,480 --> 00:22:56,750  
more people that have more experiences

613  
00:23:00,730 --> 00:22:58,490

of their own that's right as I was

614

00:23:02,350 --> 00:23:00,740

explaining earlier on the laws we're

615

00:23:03,640 --> 00:23:02,360

still your laws have you practiced

616

00:23:06,400 --> 00:23:03,650

physics easily in our universe immediate

617

00:23:08,110 --> 00:23:06,410

humors has certain physical laws and we

618

00:23:09,670 --> 00:23:08,120

can use them to do physics and always

619

00:23:10,990 --> 00:23:09,680

will be have to be able to do that the

620

00:23:13,060 --> 00:23:11,000

only question is in where these come

621

00:23:15,400 --> 00:23:13,070

from did they come from just by chance

622

00:23:18,610 --> 00:23:15,410

or which creator which conscious reality

623

00:23:20,560 --> 00:23:18,620

reality consciousness do do not like the

624

00:23:22,810 --> 00:23:20,570

idea of a god and these things enter in

625

00:23:24,760 --> 00:23:22,820

with the world as it's physically

626

00:23:26,200 --> 00:23:24,770

constructed is the same whether you

627

00:23:28,600 --> 00:23:26,210

believe this or some other hypothesis

628

00:23:29,590 --> 00:23:28,610

yes this one kind of makes a claim we

629

00:23:31,690 --> 00:23:29,600

are looking at the universe from within

630

00:23:34,210 --> 00:23:31,700

we're in the lab Attar's basically we're

631

00:23:35,740 --> 00:23:34,220

avatars in the virtual game and we play

632

00:23:37,420 --> 00:23:35,750

that game from the avatar get shot at

633

00:23:39,580 --> 00:23:37,430

running over dice and natural causes and

634

00:23:41,200 --> 00:23:39,590

then probably we return to the spirit

635

00:23:43,060 --> 00:23:41,210

world probably and probably come back

636

00:23:44,500 --> 00:23:43,070

and the brother lives and I not

637

00:23:44,950 --> 00:23:44,510

necessarily even here maybe elsewhere in

638

00:23:47,440 --> 00:23:44,960

the universe

639

00:23:49,210 --> 00:23:47,450

who knows I think it's productive to

640

00:23:51,520 --> 00:23:49,220

think of it as pockets of relative

641

00:23:54,100 --> 00:23:51,530

reality in the sense it's not that it's

642

00:23:54,730 --> 00:23:54,110

not real the experience is what's real

643

00:23:57,790 --> 00:23:54,740

right

644

00:24:02,140 --> 00:23:57,800

by very many different kinds of

645

00:24:04,480 --> 00:24:02,150

realities right well thank you I enjoyed

646

00:24:06,790 --> 00:24:04,490

your structure Bernie you created it

647

00:24:09,370 --> 00:24:06,800

seemed like the computer simulation is a

648

00:24:11,040 --> 00:24:09,380

metaphor for something we have a hard

649

00:24:13,510 --> 00:24:11,050

time getting our hands around that true

650

00:24:15,940 --> 00:24:13,520

you know I would take it pretty pretty

651  
00:24:18,160 --> 00:24:15,950  
really and that conscience is a real

652  
00:24:19,660 --> 00:24:18,170  
thing in my view it's really you can use

653  
00:24:21,790 --> 00:24:19,670  
consciously that's all there is in my

654  
00:24:23,800 --> 00:24:21,800  
view well then if conscious embodies

655  
00:24:28,240 --> 00:24:23,810  
itself within a physical body if it

656  
00:24:30,610 --> 00:24:28,250  
which is virtual then the conscious was

657  
00:24:33,700 --> 00:24:30,620  
done need to acknowledge it that virtual

658  
00:24:35,620 --> 00:24:33,710  
look that virtuality so to speak that's

659  
00:24:38,260 --> 00:24:35,630  
as real as it would be to the avatar

660  
00:24:40,570 --> 00:24:38,270  
playing the Xbox game and the game

661  
00:24:43,480 --> 00:24:40,580  
becomes a reality to the conscious

662  
00:24:45,550 --> 00:24:43,490  
beings that are playing it well who

663  
00:24:47,830 --> 00:24:45,560

universe I think happened very limited

664

00:24:49,530 --> 00:24:47,840

concept of simulation and your have a

665

00:24:51,280 --> 00:24:49,540

very expansive one and

666

00:24:53,440 --> 00:24:51,290

multidimensionality and all kinds of

667

00:24:55,360 --> 00:24:53,450

things that are allowed it's that true

668

00:24:56,920 --> 00:24:55,370

that's true that's that's a slide I had

669

00:24:59,190 --> 00:24:56,930

about South Floyd you said 600 years

670

00:25:00,990 --> 00:24:59,200

we'll be able to simulate the universe

671

00:25:02,850 --> 00:25:01,000

well I think he's off by maybe a factor

672

00:25:04,889 --> 00:25:02,860

of 10 or 100 or whatever but I think

673

00:25:06,240 --> 00:25:04,899

it's gonna happen it then it comes a

674

00:25:09,360 --> 00:25:06,250

question okay you've got the virtual

675

00:25:12,180 --> 00:25:09,370

reality is it that it's maybe populated

676  
00:25:14,490 --> 00:25:12,190  
by beings there are not really beams at

677  
00:25:16,259 --> 00:25:14,500  
all there is this just software in a

678  
00:25:18,120 --> 00:25:16,269  
computer or is this game being played by

679  
00:25:21,060 --> 00:25:18,130  
conscious itself through individual

680  
00:25:23,820 --> 00:25:21,070  
sparks of that which are us right and so

681  
00:25:26,129 --> 00:25:23,830  
there you're implying freewill like

682  
00:25:27,990 --> 00:25:26,139  
we're actors that were able to create

683  
00:25:28,950 --> 00:25:28,000  
our own angry what is essential yes not

684  
00:25:31,350 --> 00:25:28,960  
freewill this whole thing would be a

685  
00:25:34,019 --> 00:25:31,360  
charade with freewill this becomes a way

686  
00:25:35,430 --> 00:25:34,029  
to develop a whole ethical system I have

687  
00:25:37,830 --> 00:25:35,440  
nothing if a being wants to see what

688  
00:25:39,480 --> 00:25:37,840

what is nature I see here isn't because

689

00:25:41,310 --> 00:25:39,490

it or her what is his or her nature

690

00:25:41,879 --> 00:25:41,320

would bring about because of his or her

691

00:25:43,830 --> 00:25:41,889

goodness

692

00:25:45,600 --> 00:25:43,840

you know faced with circumstances that

693

00:25:47,279 --> 00:25:45,610

we live in this would be a good way to

694

00:25:49,799 --> 00:25:47,289

develop ethics he developed good and a

695

00:25:51,930 --> 00:25:49,809

good from bad by virtue of we've got you

696

00:25:53,549 --> 00:25:51,940

know God himself being frustrated by

697

00:25:55,560 --> 00:25:53,559

having a mortgage bill to pay and he's

698

00:25:56,909 --> 00:25:55,570

out of a job well you can learn from

699

00:25:59,250 --> 00:25:56,919

that even God can learn from that

700

00:26:04,799 --> 00:25:59,260

I think right ok well thank you very

701

00:26:06,870 --> 00:26:04,809

much sir I liked you talk one thing that

702

00:26:09,139 --> 00:26:06,880

I'd like to address is you make mention

703

00:26:12,720 --> 00:26:09,149

of a theoretical paradigm of

704

00:26:14,399 --> 00:26:12,730

consciousness being like a computer and

705

00:26:17,549 --> 00:26:14,409

a computer program type of simulation

706

00:26:20,039 --> 00:26:17,559

yes now how do you reconcile that with

707

00:26:22,440 --> 00:26:20,049

just that being the current scientific

708

00:26:25,169 --> 00:26:22,450

paradigm within which we couch like

709

00:26:27,990 --> 00:26:25,179

epistemological knowledge because in

710

00:26:29,909 --> 00:26:28,000

other eras we looked at other models to

711

00:26:31,889 --> 00:26:29,919

explain a very similar concept that

712

00:26:34,980 --> 00:26:31,899

you're talking about you just seem to be

713

00:26:37,350 --> 00:26:34,990

bringing it to a very current model and

714

00:26:40,019 --> 00:26:37,360

I wonder if that transit how that flows

715

00:26:42,509 --> 00:26:40,029

into other models that will come up

716

00:26:45,029 --> 00:26:42,519

later on or be reinvigorated well I

717

00:26:46,980 --> 00:26:45,039

think that don't confuse a new computer

718

00:26:48,450 --> 00:26:46,990

with just a bigger and better electronic

719

00:26:50,100 --> 00:26:48,460

package and having more and more

720

00:26:55,529 --> 00:26:50,110

transistors and you know faster and

721

00:26:57,029 --> 00:26:55,539

faster times operation times the type of

722

00:26:58,500 --> 00:26:57,039

computer could easily change but the

723

00:27:00,269 --> 00:26:58,510

basic logic behind one thing is

724

00:27:01,379 --> 00:27:00,279

mathematics there's bad build up on

725

00:27:04,710 --> 00:27:01,389

mathematics which is not going to change

726

00:27:06,149 --> 00:27:04,720

and I think that ok the Pythagorean

727

00:27:08,070 --> 00:27:06,159

theorem will always be the Pythagorean

728

00:27:09,460 --> 00:27:08,080

theorem it's never going to change and I

729

00:27:11,350 --> 00:27:09,470

think that's the basis of it

730

00:27:18,820 --> 00:27:11,360

that through a computer which probably

731

00:27:21,520 --> 00:27:18,830

can't change thank you since we have a

732

00:27:23,529 --> 00:27:21,530

moment left according to the timer I was

733

00:27:27,250 --> 00:27:23,539

going to exercise moderators privilege

734

00:27:29,169 --> 00:27:27,260

and just make the remark that I don't

735

00:27:32,200 --> 00:27:29,179

actually see a difference between the

736

00:27:34,480 --> 00:27:32,210

digital physics paradigm and the model

737

00:27:38,320 --> 00:27:34,490

you're proposing the digital physics is

738

00:27:43,270 --> 00:27:38,330

simply one proposed implementation for

739

00:27:45,190 --> 00:27:43,280

the transcendent universal mind well I

740

00:27:48,970 --> 00:27:45,200

see a huge difference between you as a

741

00:27:51,549 --> 00:27:48,980

an infinite beam of consciousness as a

742

00:27:54,370 --> 00:27:51,559

spark off the old block chip off the old

743

00:27:56,500 --> 00:27:54,380

block or us simply something running at

744

00:27:59,169 --> 00:27:56,510

some supercomputer that would be good

745

00:28:05,580 --> 00:27:59,179

instant computer crashes I think the UM

746

00:28:12,220 --> 00:28:10,510

more questions yes barely okay so

747

00:28:15,330 --> 00:28:12,230

reycarts well in his book age of

748

00:28:17,560 --> 00:28:15,340

intelligence machine talks about a

749

00:28:19,960 --> 00:28:17,570

virtual reality like a jet fighter

750

00:28:21,880 --> 00:28:19,970

simulator where it generates all the

751  
00:28:24,789 --> 00:28:21,890  
algorithms to show what you're looking

752  
00:28:27,669 --> 00:28:24,799  
through the cockpit window yes and if

753  
00:28:29,169 --> 00:28:27,679  
you turn left of course you know it has

754  
00:28:31,000 --> 00:28:29,179  
to have the structure and all the

755  
00:28:33,700 --> 00:28:31,010  
algorithms just in case you do that so

756  
00:28:35,919 --> 00:28:33,710  
yeah so I just wonder yeah I kind of

757  
00:28:38,799 --> 00:28:35,929  
agree with what York is saying as well

758  
00:28:40,270 --> 00:28:38,809  
so any comments on that I guess it's

759  
00:28:42,149 --> 00:28:40,280  
okay to say the same comments over again

760  
00:28:45,460 --> 00:28:42,159  
because I see a huge difference between

761  
00:28:47,230 --> 00:28:45,470  
me as a immortal being of consciousness

762  
00:28:51,010 --> 00:28:47,240  
that may well return almost certain does

763  
00:28:52,419 --> 00:28:51,020

return to a source versus me as some

764

00:28:54,820 --> 00:28:52,429

algorithm being a plinth and somebody's

765

00:28:56,950 --> 00:28:54,830

computer somewhere over disappear if

766

00:28:59,100 --> 00:28:56,960

their computer crashes you seem to be

767

00:29:02,640 --> 00:28:59,110

advised offices you can get in terms of

768

00:29:05,760 --> 00:29:02,650

modeling our nature