

1
00:00:06,559 --> 00:00:14,109
welcome to the skeptic zone the podcast

2
00:00:09,529 --> 00:00:14,109
from Australia for science and reason

3
00:00:20,510 --> 00:00:27,179
hello and welcome to the skeptics in

4
00:00:23,250 --> 00:00:34,019
episode number 118 for the twenty first

5
00:00:27,179 --> 00:00:36,149
of January 2011 118 21st 1821 I think

6
00:00:34,020 --> 00:00:37,830
this in numerology going on there this

7
00:00:36,149 --> 00:00:40,649
country 18 is the legal drinking and

8
00:00:37,829 --> 00:00:43,259
voting age in the United States 21 is

9
00:00:40,649 --> 00:00:45,628
the drinking age at least something to

10
00:00:43,259 --> 00:00:47,838
be said about numerology let's worry

11
00:00:45,628 --> 00:00:51,058
about that later on this week's show

12
00:00:47,838 --> 00:00:53,488
Maynard Maynard finally gets to talk to

13
00:00:51,058 --> 00:00:56,728
Phil Plait the bad astronomer and

14
00:00:53,488 --> 00:00:59,689
they'll be discussing the end of the

15
00:00:56,728 --> 00:01:02,399
world and some more important things

16
00:00:59,689 --> 00:01:05,368
following that we have George horeb

17
00:01:02,399 --> 00:01:07,890
singing with Phil Plait of course death

18
00:01:05,368 --> 00:01:11,368
from the skies from his fantastically

19
00:01:07,890 --> 00:01:15,060
good and very well-received album treble

20
00:01:11,368 --> 00:01:16,560
Jay after that I zipped down to

21
00:01:15,060 --> 00:01:19,680
Melbourne where I wonder through

22
00:01:16,560 --> 00:01:22,769
Victoria Queen Victoria markets with my

23
00:01:19,680 --> 00:01:26,760
good friend dr. Steve Roberts what will

24
00:01:22,769 --> 00:01:29,129
we find then we have dr. Richie reports

25
00:01:26,760 --> 00:01:31,109
where dr. Reggie appeared on national

26
00:01:29,129 --> 00:01:34,019
television on a show called the drum

27
00:01:31,109 --> 00:01:36,750
with Steve Canaan to talk about Andrew

28
00:01:34,019 --> 00:01:39,390
Wakefield so dr. Reggie reports this

29

00:01:36,750 --> 00:01:41,989
week is the audio from her national TV

30
00:01:39,390 --> 00:01:44,760
appearance well done dr. Richie and

31
00:01:41,989 --> 00:01:47,699
finally to wrap the show up we have the

32
00:01:44,760 --> 00:01:49,680
Melbourne think tank yes a group of us

33
00:01:47,700 --> 00:01:52,379
got down there in Melbourne around the

34
00:01:49,680 --> 00:01:56,310
table a few nice drinks barbecue on the

35
00:01:52,379 --> 00:01:58,289
way and discuss various skeptical topics

36
00:01:56,310 --> 00:02:00,840
thank you to all those people who have

37
00:01:58,290 --> 00:02:05,280
been signing up to the skeptic zone

38
00:02:00,840 --> 00:02:07,228
newsletter via wwc uptick zone TV wow

39
00:02:05,280 --> 00:02:08,729
the numbers really did skyrocket

40
00:02:07,228 --> 00:02:11,969
recently and I actually had to get an

41
00:02:08,729 --> 00:02:14,400
upgrade in the in the subscription I'm

42
00:02:11,969 --> 00:02:16,889
subscribing to thank you all very much

43
00:02:14,400 --> 00:02:19,200

and if you like the newsletter please

44

00:02:16,889 --> 00:02:21,750

forward it on to your friends and your

45

00:02:19,199 --> 00:02:23,818

enemies and finally if you want to

46

00:02:21,750 --> 00:02:26,519

really help us and dr. Reggie in

47

00:02:23,818 --> 00:02:28,798

particular we are saving up to buy dr.

48

00:02:26,519 --> 00:02:32,310

HC a fantastically good new microphone

49

00:02:28,799 --> 00:02:33,719

so her doctor rachy reports segments

50

00:02:32,310 --> 00:02:35,430

sound even better

51

00:02:33,719 --> 00:02:37,979

and they do now the best way you can

52

00:02:35,430 --> 00:02:41,340

help us if you want to help us in dr. AG

53

00:02:37,979 --> 00:02:43,829

is to become a paypal micro payer for

54

00:02:41,340 --> 00:02:46,770

the skeptic zone for less less than a

55

00:02:43,830 --> 00:02:49,440

dollar a week that really helps us keep

56

00:02:46,770 --> 00:02:51,180

the show on and do things like by dr.

57

00:02:49,439 --> 00:02:54,150

rach gia fantastically good new

58
00:02:51,180 --> 00:02:56,040
microphone you can sign up for less than

59
00:02:54,150 --> 00:02:58,050
a dollar a week for as long as you like

60
00:02:56,039 --> 00:03:00,780
or as short as you like at the website

61
00:02:58,050 --> 00:03:03,210
ok enough from me enough for me I'm

62
00:03:00,780 --> 00:03:07,319
going to race out and have a nice ginger

63
00:03:03,210 --> 00:03:10,849
beer of course yum yum yum while you

64
00:03:07,319 --> 00:03:10,849
enjoy the skeptics out

65
00:03:23,699 --> 00:03:29,799
yes it was the great meeting of the

66
00:03:26,110 --> 00:03:31,990
minds Maynard and dr. Phil Plait over

67
00:03:29,800 --> 00:03:34,030
Skype and over telephone because i think

68
00:03:31,990 --> 00:03:37,659
the enemies of reason we're trying to

69
00:03:34,030 --> 00:03:40,419
sabotage the whole thing may not started

70
00:03:37,659 --> 00:03:43,810
off by asking Phil Plait about his TV

71
00:03:40,419 --> 00:03:46,259
show bad universe and why he destroyed

72
00:03:43,810 --> 00:03:46,259
Sydney

73
00:03:47,129 --> 00:03:52,000
we needed to pick someplace to show what

74
00:03:50,318 --> 00:03:55,389
it would be like when it gets hit by a

75
00:03:52,000 --> 00:03:57,280
big rock and in the movies and TV shows

76
00:03:55,389 --> 00:03:59,649
at least in America they keep showing

77
00:03:57,280 --> 00:04:02,409
the same places we've seen London hit

78
00:03:59,650 --> 00:04:05,050
we've seen San Francisco and New York

79
00:04:02,409 --> 00:04:07,900
and and France Paris any place has a

80
00:04:05,050 --> 00:04:09,540
landmark and we have a team who was

81
00:04:07,900 --> 00:04:12,099
researching this and they found that

82
00:04:09,539 --> 00:04:15,459
Sydney had never been hit by an asteroid

83
00:04:12,099 --> 00:04:17,379
on TV and it has really well to find

84
00:04:15,459 --> 00:04:19,899
landmarks you've got the Opera House and

85
00:04:17,379 --> 00:04:22,540
the Harbour Bridge and those are iconic

86

00:04:19,899 --> 00:04:24,129
so we decided to pick them and I wound

87
00:04:22,540 --> 00:04:25,960
up apologizing a lot to all my

88
00:04:24,129 --> 00:04:27,519
Australian friends now what was the saws

89
00:04:25,959 --> 00:04:29,979
of the asteroid and how fast was it

90
00:04:27,519 --> 00:04:32,740
going we just sort of give a size of

91
00:04:29,980 --> 00:04:34,689
about a kilometer we don't we don't make

92
00:04:32,740 --> 00:04:37,030
it I think to specific simply because

93
00:04:34,689 --> 00:04:39,029
that's sort of a lower limit of the size

94
00:04:37,029 --> 00:04:40,929
you need to start having global

95
00:04:39,029 --> 00:04:44,228
consequences if you have something

96
00:04:40,930 --> 00:04:45,910
that's a hundred metres across its local

97
00:04:44,228 --> 00:04:47,079
it'll it'll wipe out a city or something

98
00:04:45,910 --> 00:04:49,300
like that and the bigger it gets the

99
00:04:47,079 --> 00:04:51,699
more damage does in fact in this one we

100
00:04:49,300 --> 00:04:53,829

do give a size because we compare it to

101

00:04:51,699 --> 00:04:55,750

our explosion of course s droids on

102

00:04:53,829 --> 00:04:58,599

explosive that is travelling really fast

103

00:04:55,750 --> 00:05:00,459

so how do you convert the kinetic energy

104

00:04:58,600 --> 00:05:01,629

into explosive energy how do you let

105

00:05:00,459 --> 00:05:03,430

that app well that's a really good

106

00:05:01,629 --> 00:05:05,350

question in fact a long time ago has

107

00:05:03,430 --> 00:05:06,910

asked if a comet hits us and it's made

108

00:05:05,350 --> 00:05:08,770

of ice why does it set things on fire

109

00:05:06,910 --> 00:05:10,060

that was a good question i'd never

110

00:05:08,769 --> 00:05:12,490

thought of it and the reason is because

111

00:05:10,060 --> 00:05:13,990

there's an energy involved with motion

112

00:05:12,490 --> 00:05:15,610

if you have a big rock and it's just

113

00:05:13,990 --> 00:05:17,439

sitting there it's just sitting there

114

00:05:15,610 --> 00:05:19,419

there's no energy in it but if you start

115
00:05:17,439 --> 00:05:21,370
moving it it takes energy to move it and

116
00:05:19,418 --> 00:05:23,500
it takes energy to stop it and the

117
00:05:21,370 --> 00:05:26,050
faster it's moving the more energy it

118
00:05:23,500 --> 00:05:28,149
has and these asteroids are huge they

119
00:05:26,050 --> 00:05:30,430
could weigh billions of tons and they're

120
00:05:28,149 --> 00:05:32,500
moving at many many many kilometers per

121
00:05:30,430 --> 00:05:35,740
second even something a hundred metres

122
00:05:32,500 --> 00:05:40,810
across when it hits could explode like

123
00:05:35,740 --> 00:05:43,180
20 million tons of TNT 20 megatons but

124
00:05:40,810 --> 00:05:45,069
you know if something a mile wide hits

125
00:05:43,180 --> 00:05:47,680
there's no place in Australia to be safe

126
00:05:45,069 --> 00:05:48,969
yeah it depends on where you are I mean

127
00:05:47,680 --> 00:05:50,860
if you're if you're within a certain

128
00:05:48,970 --> 00:05:53,140
distance there's going to be the flash

129
00:05:50,860 --> 00:05:54,250
of heat that will simply vaporize

130
00:05:53,139 --> 00:05:56,740
anything that that's within

131
00:05:54,250 --> 00:05:58,389
line-of-sight of it farther away yeah

132
00:05:56,740 --> 00:06:00,639
there's a pressure wave just basically a

133
00:05:58,389 --> 00:06:02,709
super sound wave that could basic

134
00:06:00,639 --> 00:06:04,749
you know turn you into I think cottage

135
00:06:02,709 --> 00:06:06,188
cheese is the word I used feel I've

136
00:06:04,749 --> 00:06:08,139
gotta ask you a few speculative

137
00:06:06,189 --> 00:06:09,909
questions here but even some speculation

138
00:06:08,139 --> 00:06:11,740
sure what do you think about the whole

139
00:06:09,908 --> 00:06:13,478
thing about disclosure do you think one

140
00:06:11,740 --> 00:06:15,999
day the American government will say oh

141
00:06:13,478 --> 00:06:17,860
yeah all along UFOs are real and we knew

142
00:06:15,999 --> 00:06:19,569
it do you think that will ever happen no

143

00:06:17,860 --> 00:06:21,788
because I don't think there's anything

144
00:06:19,569 --> 00:06:23,680
to that because the speed of light

145
00:06:21,788 --> 00:06:24,968
barrier yes that's that's not the

146
00:06:23,680 --> 00:06:27,129
direction i was thinking what I was

147
00:06:24,968 --> 00:06:30,009
thinking is that I just don't think that

148
00:06:27,129 --> 00:06:33,759
the vast majority and by vast majority I

149
00:06:30,009 --> 00:06:36,819
mean 99 plus percent of UFO reports are

150
00:06:33,759 --> 00:06:39,908
credible people are very easily fooled

151
00:06:36,819 --> 00:06:42,400
it's very easy to think that a satellite

152
00:06:39,908 --> 00:06:44,829
in the sky or a meteor or seriously

153
00:06:42,399 --> 00:06:48,218
Venus Venus is reported as the UFO all

154
00:06:44,829 --> 00:06:50,228
the time just last year or was it about

155
00:06:48,218 --> 00:06:51,819
a year and a half ago in the u.s. there

156
00:06:50,228 --> 00:06:55,300
were there were news reports and all

157
00:06:51,819 --> 00:06:57,250

this stuff about a UFO over a lake one

158

00:06:55,300 --> 00:07:00,460

of the great lakes and it was clearly

159

00:06:57,250 --> 00:07:03,069

Venus clearly so you know a lot of these

160

00:07:00,459 --> 00:07:04,930

reports aren't right and and I just

161

00:07:03,069 --> 00:07:07,479

don't see it happening and yes from that

162

00:07:04,930 --> 00:07:10,240

angle I just don't see aliens coming

163

00:07:07,478 --> 00:07:12,430

here to visit us fly around in our skies

164

00:07:10,240 --> 00:07:13,930

and then leave it just doesn't make any

165

00:07:12,430 --> 00:07:16,149

sense to me especially not in the

166

00:07:13,930 --> 00:07:18,189

numbers that are that are reported so I

167

00:07:16,149 --> 00:07:20,139

don't think aliens are visiting us I

168

00:07:18,189 --> 00:07:21,759

think there's life out there I think

169

00:07:20,139 --> 00:07:24,038

what we're learning about the physics of

170

00:07:21,759 --> 00:07:27,009

the way planets evolved I think that

171

00:07:24,038 --> 00:07:28,449

that pretty much guarantees that there's

172
00:07:27,009 --> 00:07:30,218
going to be life out there we're on the

173
00:07:28,449 --> 00:07:33,038
verge of finding planets like the earth

174
00:07:30,218 --> 00:07:34,658
now I think in five years we'll know

175
00:07:33,038 --> 00:07:36,310
whether there are planets like the earth

176
00:07:34,658 --> 00:07:38,500
out there or not and I think we'll know

177
00:07:36,310 --> 00:07:40,300
in the positive but we just don't know

178
00:07:38,500 --> 00:07:42,699
about life out there right now and I I

179
00:07:40,300 --> 00:07:45,278
don't think there's enough of that to

180
00:07:42,699 --> 00:07:48,028
get here and investigate us so no i'm

181
00:07:45,278 --> 00:07:50,319
i'm not a big big proponent of

182
00:07:48,028 --> 00:07:53,019
government disclosure stuff where do you

183
00:07:50,319 --> 00:07:55,240
sit with the Tunguska event comet

184
00:07:53,019 --> 00:07:57,038
antimatter what do you think it was as

185
00:07:55,240 --> 00:07:59,439
an astronomer come on were you there

186
00:07:57,038 --> 00:08:00,818
feel uh no was not there now what you're

187
00:07:59,439 --> 00:08:03,669
talking about is the Tunguska event

188
00:08:00,819 --> 00:08:06,908
which was in 1908 its engines explosion

189
00:08:03,668 --> 00:08:09,639
Ella Krakatoa or some volcanic

190
00:08:06,908 --> 00:08:11,408
explosions are bigger this released the

191
00:08:09,639 --> 00:08:14,259
energy of roughly a 20 Megaton nuclear

192
00:08:11,408 --> 00:08:16,870
bomb and what was it now when I was

193
00:08:14,259 --> 00:08:18,279
kid I member reading about it could have

194
00:08:16,870 --> 00:08:19,780
been antimatter could have been a black

195
00:08:18,279 --> 00:08:22,449
hole it could have been a UFO and the

196
00:08:19,779 --> 00:08:24,459
reason people speculate so much about

197
00:08:22,449 --> 00:08:25,870
what it is is because there's no crater

198
00:08:24,459 --> 00:08:27,789
there was an expedition that went there

199
00:08:25,870 --> 00:08:29,860
about 20 years later and they found no

200

00:08:27,790 --> 00:08:31,180
crater but they did find all the trees

201
00:08:29,860 --> 00:08:33,580
were knocked down and had been set on

202
00:08:31,180 --> 00:08:36,070
fire so clearly this was a very

203
00:08:33,580 --> 00:08:38,770
energetic event well we found out much

204
00:08:36,070 --> 00:08:40,300
much much later and I mean 20 years ago

205
00:08:38,769 --> 00:08:41,590
something like that I was in grad school

206
00:08:40,299 --> 00:08:44,139
and people were just starting figure

207
00:08:41,590 --> 00:08:46,660
this out that you can have asteroids or

208
00:08:44,139 --> 00:08:48,730
comets that will explode in the air and

209
00:08:46,659 --> 00:08:51,459
this release is a huge amount of energy

210
00:08:48,730 --> 00:08:53,590
and can set fire to a lot of the land

211
00:08:51,460 --> 00:08:55,509
but it doesn't leave a crater because

212
00:08:53,590 --> 00:08:57,790
there's no physical impact with the

213
00:08:55,509 --> 00:08:59,950
ground we're almost a hundred percent

214
00:08:57,789 --> 00:09:02,110

positive that this really was just a

215

00:08:59,950 --> 00:09:04,450

chunk of rock or ice that blew up in the

216

00:09:02,110 --> 00:09:06,310

atmosphere fulfilled plate is their son

217

00:09:04,450 --> 00:09:08,050

like astronomical event you haven't seen

218

00:09:06,309 --> 00:09:10,779

in your lifetime that you'd like to see

219

00:09:08,049 --> 00:09:12,969

that maybe won't kill us oh yeah total

220

00:09:10,779 --> 00:09:14,049

solar eclipse never seen one everybody

221

00:09:12,970 --> 00:09:15,519

tells me you've seen one it's

222

00:09:14,049 --> 00:09:16,899

life-changing it's one of the most

223

00:09:15,519 --> 00:09:20,079

desperately beautiful things you'll ever

224

00:09:16,899 --> 00:09:22,090

see why did you bag Pluto you one of

225

00:09:20,080 --> 00:09:24,250

those guys who voted Pluto out of the

226

00:09:22,090 --> 00:09:25,780

solar system no I had nothing to do with

227

00:09:24,250 --> 00:09:27,549

that I wasn't at that meeting I've gone

228

00:09:25,779 --> 00:09:29,259

back and forth on this a lot I've talked

229
00:09:27,549 --> 00:09:30,699
to a lot of friends of mine including

230
00:09:29,259 --> 00:09:33,610
some astronomers who were involved with

231
00:09:30,700 --> 00:09:35,320
that and I think that the idea of voting

232
00:09:33,610 --> 00:09:36,669
on whether Pluto is a planet or voting

233
00:09:35,320 --> 00:09:38,379
on the rules of what should be a planet

234
00:09:36,669 --> 00:09:40,149
or not to me it's silly now how do you

235
00:09:38,379 --> 00:09:41,590
feel about the ilkook lab i reckon

236
00:09:40,149 --> 00:09:43,509
that's pretty cool well the Oort cloud

237
00:09:41,590 --> 00:09:45,570
is this it's it's still a theoretical

238
00:09:43,509 --> 00:09:48,100
concept that there's this repository of

239
00:09:45,570 --> 00:09:49,300
gazillions of comets way out in the

240
00:09:48,100 --> 00:09:52,480
solar system and we've never actually

241
00:09:49,299 --> 00:09:54,879
seen it but we did predict that there

242
00:09:52,480 --> 00:09:57,519
would be sort of an intermediate cluster

243
00:09:54,879 --> 00:09:59,439
of these things between us and it which

244
00:09:57,519 --> 00:10:02,019
is called the edgeworth Kuiper belt and

245
00:09:59,440 --> 00:10:03,130
in fact that has been seen which lends a

246
00:10:02,019 --> 00:10:05,289
lot of credence to the fact that this

247
00:10:03,129 --> 00:10:07,090
cloud is out there and it may have you

248
00:10:05,289 --> 00:10:08,620
know billions of these things out there

249
00:10:07,090 --> 00:10:10,840
and that's where our long-term comets

250
00:10:08,620 --> 00:10:12,190
come from and of course in Independence

251
00:10:10,840 --> 00:10:14,590
Day that's where the aliens big

252
00:10:12,190 --> 00:10:16,030
spaceship hid before it came out and if

253
00:10:14,590 --> 00:10:17,889
you were trying to hide be the place to

254
00:10:16,029 --> 00:10:19,269
be or you'd come from the Sun wouldn't

255
00:10:17,889 --> 00:10:20,740
you say we couldn't see it yeah that's

256
00:10:19,269 --> 00:10:22,629
actually hard I guess it depends on how

257

00:10:20,740 --> 00:10:24,519
fast your ship moves people think you

258
00:10:22,629 --> 00:10:26,950
know just moving a spaceship around is

259
00:10:24,519 --> 00:10:28,179
like driving a car but it's not it's

260
00:10:26,950 --> 00:10:29,589
like driving a

261
00:10:28,179 --> 00:10:30,969
r if your house is moving a hundred

262
00:10:29,589 --> 00:10:32,680
miles an hour in one direction in your

263
00:10:30,970 --> 00:10:34,480
garage is moving 100 miles an hour in

264
00:10:32,679 --> 00:10:36,219
the other everything's moving and it's

265
00:10:34,480 --> 00:10:38,560
really hard to just you can't just point

266
00:10:36,220 --> 00:10:40,660
an aim and go you have to predict where

267
00:10:38,559 --> 00:10:42,159
your your targets gonna be when you get

268
00:10:40,659 --> 00:10:44,620
there and so it's hard to just come out

269
00:10:42,159 --> 00:10:47,409
of the Sun it'd be really really hard

270
00:10:44,620 --> 00:10:53,409
for aliens to sneak up on us chances are

271
00:10:47,409 --> 00:10:55,389

we'd see him hello for those people that

272

00:10:53,409 --> 00:10:56,620

wonder like is he suddenly gone under

273

00:10:55,389 --> 00:10:57,819

the water or something our skype

274

00:10:56,620 --> 00:10:59,799

connection just wasn't behaving itself

275

00:10:57,820 --> 00:11:01,270

was it Phil no not terribly well

276

00:10:59,799 --> 00:11:03,219

sometimes that happens we were just

277

00:11:01,269 --> 00:11:04,809

talking about near abu there and i was

278

00:11:03,220 --> 00:11:06,850

just saying that as an astronomer when

279

00:11:04,809 --> 00:11:09,099

people go on about these planets that

280

00:11:06,850 --> 00:11:11,980

you and everyone else in the business is

281

00:11:09,100 --> 00:11:13,540

pretty sure exactly does not exist how

282

00:11:11,980 --> 00:11:15,399

do you not go ballistic about it when

283

00:11:13,539 --> 00:11:18,189

you hear it over and over and over again

284

00:11:15,399 --> 00:11:19,839

it can be very tough but in this case

285

00:11:18,190 --> 00:11:21,250

it's even harder because there are

286
00:11:19,839 --> 00:11:23,740
people out there who were scared by this

287
00:11:21,250 --> 00:11:25,450
and this whole planet x thing you can go

288
00:11:23,740 --> 00:11:27,759
back into the internet archives and find

289
00:11:25,450 --> 00:11:29,649
people who were you know selling their

290
00:11:27,759 --> 00:11:30,610
houses trying to move to safe locations

291
00:11:29,649 --> 00:11:33,370
because they thought this thing was

292
00:11:30,610 --> 00:11:35,769
coming in 2003 and in fact this planet

293
00:11:33,370 --> 00:11:37,539
doesn't exist we know if there were

294
00:11:35,769 --> 00:11:39,730
something like Mars to land through the

295
00:11:37,539 --> 00:11:41,230
solar system all the planets orbits

296
00:11:39,730 --> 00:11:42,700
would be all messed up and and the

297
00:11:41,230 --> 00:11:45,310
people talking about this are talking

298
00:11:42,700 --> 00:11:47,528
about a planet much bigger than Mars so

299
00:11:45,309 --> 00:11:50,500
clearly this thing doesn't exist so it's

300
00:11:47,528 --> 00:11:52,509
pretty easy to say no that it that's

301
00:11:50,500 --> 00:11:53,950
wrong but it still scares people and

302
00:11:52,509 --> 00:11:57,189
that's very upsetting to me and what

303
00:11:53,950 --> 00:11:59,379
about Apophis that's the asteroid that's

304
00:11:57,190 --> 00:12:01,060
going to come really really close to us

305
00:11:59,379 --> 00:12:04,860
now see that's that's a real thing

306
00:12:01,059 --> 00:12:07,929
Apophis is not going to hit us in 20 29

307
00:12:04,860 --> 00:12:09,610
but it is going to pass very close to

308
00:12:07,929 --> 00:12:11,229
the earth it's going to pass so close we

309
00:12:09,610 --> 00:12:13,028
can't really know exactly what's going

310
00:12:11,230 --> 00:12:14,649
to happen to its orbit and it's possible

311
00:12:13,028 --> 00:12:16,809
that seven years later it will come back

312
00:12:14,649 --> 00:12:19,569
and hit us now the odds of that are

313
00:12:16,809 --> 00:12:20,559
incredibly low and we don't think it's

314

00:12:19,570 --> 00:12:23,230
going to happen it's like one in a

315
00:12:20,559 --> 00:12:24,699
million it's very low but someday there

316
00:12:23,230 --> 00:12:26,889
will be an asteroid that's going to do

317
00:12:24,700 --> 00:12:29,020
this so Apophis is a really good test

318
00:12:26,889 --> 00:12:30,490
case for us I'm not worried about it I

319
00:12:29,019 --> 00:12:32,319
don't think it's going to hit but it is

320
00:12:30,490 --> 00:12:34,450
something we should study and learn from

321
00:12:32,320 --> 00:12:36,278
so that when the day comes we will be

322
00:12:34,450 --> 00:12:38,379
able to do something and look at your

323
00:12:36,278 --> 00:12:40,970
dacha on the Discovery Channel Apophis

324
00:12:38,379 --> 00:12:42,740
is it shaped like a hippo

325
00:12:40,970 --> 00:12:45,110
we don't actually know what apophysis

326
00:12:42,740 --> 00:12:47,629
shape like oh okay so you bit of

327
00:12:45,110 --> 00:12:50,060
artistic endeavor look like a potato or

328
00:12:47,629 --> 00:12:51,470

bit of a hippo yeah potato they're the

329

00:12:50,059 --> 00:12:53,628

model we used was just something that

330

00:12:51,470 --> 00:12:55,040

was based on some observations but we

331

00:12:53,629 --> 00:12:56,930

don't really know what it's shaped like

332

00:12:55,039 --> 00:12:58,969

we know that a lot of asteroids are kind

333

00:12:56,929 --> 00:13:00,559

of potato shaped so that was just a

334

00:12:58,970 --> 00:13:02,500

model to give you an idea of what it

335

00:13:00,559 --> 00:13:05,059

might be like now how do you get on with

336

00:13:02,500 --> 00:13:07,370

astrologers has been a bit of a haha on

337

00:13:05,059 --> 00:13:09,229

the BBC this week some astronomers over

338

00:13:07,370 --> 00:13:10,490

there said something I don't know

339

00:13:09,230 --> 00:13:12,889

exactly what it was but quite an

340

00:13:10,490 --> 00:13:17,568

unfavorable about astrologist do us all

341

00:13:12,889 --> 00:13:19,639

just get on no not terribly well that

342

00:13:17,568 --> 00:13:21,229

whole thing was so ridiculous it was

343
00:13:19,639 --> 00:13:23,509
just some astronomers saying you know

344
00:13:21,230 --> 00:13:25,519
the the signs of the zodiac have changed

345
00:13:23,509 --> 00:13:26,810
over the past few thousand years this

346
00:13:25,519 --> 00:13:30,139
this is nothing new we've known about

347
00:13:26,809 --> 00:13:32,958
this for centuries but somehow the media

348
00:13:30,139 --> 00:13:35,060
translated this as astronomers add new

349
00:13:32,958 --> 00:13:38,479
sign to the zodiac and it's got spread

350
00:13:35,059 --> 00:13:41,119
through Twitter and everywhere and it

351
00:13:38,480 --> 00:13:44,120
was just it was so silly and in the

352
00:13:41,120 --> 00:13:46,068
meantime to me astrology is nonsense it

353
00:13:44,120 --> 00:13:48,438
doesn't make any sense there's no way

354
00:13:46,068 --> 00:13:50,838
that position of the Sun when you were

355
00:13:48,438 --> 00:13:52,370
born can have any influence on you and

356
00:13:50,839 --> 00:13:55,220
it's been tested over and over again and

357
00:13:52,370 --> 00:13:56,659
shown not to work so it's not just you

358
00:13:55,220 --> 00:13:58,699
can't prove it works we can actually

359
00:13:56,659 --> 00:14:00,679
show it doesn't and yet people still

360
00:13:58,698 --> 00:14:02,299
believe in it and it's it's because like

361
00:14:00,679 --> 00:14:04,008
you said earlier it's maddening where

362
00:14:02,299 --> 00:14:06,409
did you get that catchphrase of yours a

363
00:14:04,009 --> 00:14:11,028
holy alcala kala kala is it a muppets

364
00:14:06,409 --> 00:14:13,129
thing no and and that that's a whole

365
00:14:11,028 --> 00:14:15,620
thing what I've been saying it for years

366
00:14:13,129 --> 00:14:18,350
it's the name of a volcano in Hawaii

367
00:14:15,620 --> 00:14:20,089
it's haleakala and there was a TV show

368
00:14:18,350 --> 00:14:21,860
back in the 80s I used to watch and

369
00:14:20,089 --> 00:14:23,870
somebody actually said holy haleakala

370
00:14:21,860 --> 00:14:26,028
while they were on vacation there and it

371

00:14:23,870 --> 00:14:27,558
just struck me as funny I I said it at

372
00:14:26,028 --> 00:14:30,169
one point while we were filming my

373
00:14:27,558 --> 00:14:31,969
producer liked it so I said it a few

374
00:14:30,169 --> 00:14:33,378
more times and I said you know just use

375
00:14:31,970 --> 00:14:34,699
a couple of it use it a couple of times

376
00:14:33,379 --> 00:14:36,409
and he went abusing it like I don't even

377
00:14:34,698 --> 00:14:37,490
know seven times or something crazy I

378
00:14:36,409 --> 00:14:40,490
thought it might have been I walk the

379
00:14:37,490 --> 00:14:42,818
dinosaur was not was thing oh oh I can i

380
00:14:40,490 --> 00:14:45,009
connect a boom boom boom I like

381
00:14:42,818 --> 00:14:46,928
boom no not like that that's a great

382
00:14:45,009 --> 00:14:48,879
quote from you i really like it i hope

383
00:14:46,928 --> 00:14:51,068
it's your quote the universe is cool

384
00:14:48,879 --> 00:14:54,879
enough without making up crap about it

385
00:14:51,068 --> 00:14:57,188

yeah that's me I say that a lot because

386

00:14:54,879 --> 00:14:58,359

honestly you know people make stuff up

387

00:14:57,188 --> 00:14:59,588

about the universe all the time because

388

00:14:58,359 --> 00:15:01,899

I think they want to make it more

389

00:14:59,589 --> 00:15:03,399

exciting but you don't need to once you

390

00:15:01,899 --> 00:15:05,499

learn about what's really out there and

391

00:15:03,399 --> 00:15:08,379

what's really going on there's enough

392

00:15:05,499 --> 00:15:10,149

Wonder and awe and majesty out there for

393

00:15:08,379 --> 00:15:11,589

anyone who play we're gonna see on the

394

00:15:10,149 --> 00:15:13,600

Discovery Channel just give us one thing

395

00:15:11,589 --> 00:15:15,279

we can investigate and take away and

396

00:15:13,600 --> 00:15:16,629

have a look up on the net or on some

397

00:15:15,278 --> 00:15:18,038

astronomy sites what's one thing we

398

00:15:16,629 --> 00:15:19,538

could have a look at this afternoon and

399

00:15:18,038 --> 00:15:21,909

get a bit of that wonder if you go to

400
00:15:19,538 --> 00:15:23,350
bad astronomy com which is my website

401
00:15:21,909 --> 00:15:25,418
that will take you to my blog which is

402
00:15:23,350 --> 00:15:27,459
being hosted by discover magazine I post

403
00:15:25,418 --> 00:15:29,470
pictures there all the time and describe

404
00:15:27,458 --> 00:15:30,969
the science behind them I just posted

405
00:15:29,470 --> 00:15:32,739
one of the Orion Nebula which is

406
00:15:30,970 --> 00:15:34,749
gorgeous another one of a nearby

407
00:15:32,739 --> 00:15:36,759
galaxies with galaxies that are much

408
00:15:34,749 --> 00:15:38,558
more distant in the background and I use

409
00:15:36,759 --> 00:15:41,019
that as an excuse to talk about how big

410
00:15:38,558 --> 00:15:43,238
the universe is but how big of a role we

411
00:15:41,019 --> 00:15:44,649
play in it I love doing that sort of

412
00:15:43,239 --> 00:15:45,788
thing and I think if you if you scroll

413
00:15:44,649 --> 00:15:47,798
through and look for some of the things

414
00:15:45,788 --> 00:15:49,178
I talk about there you'll find some

415
00:15:47,798 --> 00:15:51,338
things to interest you what do you think

416
00:15:49,178 --> 00:15:53,619
of the Drake Equation are any of those

417
00:15:51,339 --> 00:15:55,720
numbers even possible it was just such a

418
00:15:53,619 --> 00:15:57,519
wild guess it's just don't worry about

419
00:15:55,720 --> 00:15:58,928
it well actually the Drake Equation is a

420
00:15:57,519 --> 00:16:00,879
way of estimating how much life there is

421
00:15:58,928 --> 00:16:03,639
in the universe and it depends on things

422
00:16:00,879 --> 00:16:04,989
like how how often stars are formed how

423
00:16:03,639 --> 00:16:06,970
many of them have planets how many of

424
00:16:04,989 --> 00:16:09,189
those planets have life and ten years

425
00:16:06,970 --> 00:16:10,928
ago we really didn't know but now we've

426
00:16:09,188 --> 00:16:13,389
got several of those terms in the

427
00:16:10,928 --> 00:16:15,308
equation pretty well understood we now

428

00:16:13,389 --> 00:16:16,568
often stars are born in the galaxy and

429
00:16:15,308 --> 00:16:18,578
we're getting a good idea of how many of

430
00:16:16,568 --> 00:16:20,649
them have planets so we're able to start

431
00:16:18,578 --> 00:16:22,868
to nail this thing down a little bit but

432
00:16:20,649 --> 00:16:25,269
it's not supposed to give you a specific

433
00:16:22,869 --> 00:16:27,369
number it's not going to be six I talked

434
00:16:25,269 --> 00:16:30,220
about this in a second episode and there

435
00:16:27,369 --> 00:16:31,959
could be you know one or two alien

436
00:16:30,220 --> 00:16:33,639
civilizations in the galaxy or there

437
00:16:31,958 --> 00:16:35,978
could be thousands we don't really know

438
00:16:33,639 --> 00:16:37,329
but the more we study the stuff the more

439
00:16:35,979 --> 00:16:38,889
we find out the better we'll be able to

440
00:16:37,328 --> 00:16:40,388
nail that down new being on the cutting

441
00:16:38,889 --> 00:16:42,339
edge of science when you run up against

442
00:16:40,389 --> 00:16:44,979

someone who is into astrology or

443

00:16:42,339 --> 00:16:46,809

seriously believes in UFO what is the

444

00:16:44,979 --> 00:16:48,819

way that you try and change their mind

445

00:16:46,808 --> 00:16:50,350

well how do you approach it I've been a

446

00:16:48,818 --> 00:16:52,178

little forceful here and in this

447

00:16:50,350 --> 00:16:53,829

particular interview but I actually I'm

448

00:16:52,178 --> 00:16:55,238

very sympathetic to people who believe

449

00:16:53,828 --> 00:16:55,839

in things because I was that way when I

450

00:16:55,239 --> 00:16:58,269

was a kid

451

00:16:55,840 --> 00:16:59,769

I believed in UFOs and telepathy and all

452

00:16:58,269 --> 00:17:01,509

that sort of stuff and as the evidence

453

00:16:59,769 --> 00:17:03,850

became more overwhelming as I read more

454

00:17:01,509 --> 00:17:05,890

about it I realized that no this stuff

455

00:17:03,850 --> 00:17:07,720

doesn't exist so I try to be sympathetic

456

00:17:05,890 --> 00:17:10,509

when I'm talking to people i try to try

457
00:17:07,720 --> 00:17:11,829
to be nice and say you know well let's

458
00:17:10,509 --> 00:17:13,029
look at some of the evidence look let's

459
00:17:11,829 --> 00:17:15,939
look at some of the claims you're making

460
00:17:13,029 --> 00:17:18,220
and see if they if they work out and try

461
00:17:15,940 --> 00:17:20,799
to you know reach across to them and

462
00:17:18,220 --> 00:17:22,180
show them what what i think is really

463
00:17:20,799 --> 00:17:23,889
happening and doesn't always work and

464
00:17:22,180 --> 00:17:25,750
that's okay you can't convince everybody

465
00:17:23,890 --> 00:17:26,950
but hopefully a little by little you

466
00:17:25,750 --> 00:17:28,450
know if you can convince them of one

467
00:17:26,950 --> 00:17:30,250
little thing get your foot in the door

468
00:17:28,450 --> 00:17:31,960
there eventually they'll be able to

469
00:17:30,250 --> 00:17:33,519
apply that to other other aspects of

470
00:17:31,960 --> 00:17:35,319
their lives as well that's the best we

471
00:17:33,519 --> 00:17:37,660
can hope for now you are known as the

472
00:17:35,319 --> 00:17:41,619
singing astronomer and I've got the jaws

473
00:17:37,660 --> 00:17:43,840
Rob track that you feature on I don't

474
00:17:41,619 --> 00:17:46,089
actually sing for that song but I'm

475
00:17:43,839 --> 00:17:47,349
actually i narrate that song George Rob

476
00:17:46,089 --> 00:17:49,509
is a friend of mine he's a skeptic and

477
00:17:47,349 --> 00:17:52,029
he's a musician and he came out with his

478
00:17:49,509 --> 00:17:53,559
latest album called trebuchet and on it

479
00:17:52,029 --> 00:17:55,420
as a song called death from the skies

480
00:17:53,559 --> 00:17:57,429
and he plays the background music and

481
00:17:55,420 --> 00:17:59,529
has me reading statistics of the

482
00:17:57,430 --> 00:18:02,049
likelihood of a nearby supernova or a

483
00:17:59,529 --> 00:18:03,339
black hole passing by the earth and that

484
00:18:02,049 --> 00:18:04,750
was actually a lot of fun to do i'm

485

00:18:03,339 --> 00:18:06,250
hoping to take that on the road the

486
00:18:04,750 --> 00:18:08,589
lunge track isn't supposed to scare us

487
00:18:06,250 --> 00:18:09,430
it's just to open our eyes yeah and

488
00:18:08,589 --> 00:18:10,899
matter of fact it might even be

489
00:18:09,430 --> 00:18:12,700
reassuring because the odds are so low

490
00:18:10,900 --> 00:18:14,259
of these things happening gonna come to

491
00:18:12,700 --> 00:18:16,240
Australia going to look at a food crisis

492
00:18:14,259 --> 00:18:19,049
Oh what I love to come back I would come

493
00:18:16,240 --> 00:18:19,049
back in a heartbeat

494
00:18:21,440 --> 00:18:23,440
Oh

495
00:18:36,648 --> 00:18:44,008
odds of dying by Astra impact one in

496
00:18:40,818 --> 00:18:47,028
700,000 the overall risk of dying

497
00:18:44,009 --> 00:18:49,649
primitive act in your lifetime is one in

498
00:18:47,028 --> 00:18:51,959
700,000 somewhat less that's being

499
00:18:49,648 --> 00:18:54,418

killed by a fireworks accident but still

500

00:18:51,959 --> 00:18:57,078

more cruel than being killed on the news

501

00:18:54,419 --> 00:18:57,079

montara

502

00:19:16,039 --> 00:19:22,799

odds of dying by supernovae explosion

503

00:19:19,079 --> 00:19:24,509

one in ten million supernovae happen

504

00:19:22,799 --> 00:19:27,509

about once per century in anything

505

00:19:24,509 --> 00:19:30,809

galaxy a soon event would cause a mass

506

00:19:27,509 --> 00:19:33,000

extinction nearly everyone hurry you

507

00:19:30,809 --> 00:19:36,019

specifically dying from one during your

508

00:19:33,000 --> 00:19:36,019

lifetime are

509

00:19:44,930 --> 00:19:51,259

odds of dying by solar flare or coronal

510

00:19:48,089 --> 00:19:53,849

mass ejection zero but with an asterisk

511

00:19:51,259 --> 00:19:55,529

popping big solar event can seriously

512

00:19:53,849 --> 00:19:58,379

impair or destroy a nation's

513

00:19:55,529 --> 00:20:01,920

infrastructure and come into all it will

514
00:19:58,380 --> 00:20:04,680
not directly cause death we have to this

515
00:20:01,920 --> 00:20:06,600
zero chance for human fatality but with

516
00:20:04,680 --> 00:20:10,519
an extra Ska's a known to the

517
00:20:06,599 --> 00:20:10,519
destructive power it has in other ways

518
00:20:17,930 --> 00:20:24,630
odds of dying by gamma ray burst one in

519
00:20:21,000 --> 00:20:27,059
14 million gary bursts are dangerous for

520
00:20:24,630 --> 00:20:29,400
distances of more than 7,000 five years

521
00:20:27,059 --> 00:20:31,829
we have to be in a fan of a relatively

522
00:20:29,400 --> 00:20:35,460
narrow beam get hurt your odds of being

523
00:20:31,829 --> 00:20:37,289
killed by a grb or 114 million you are

524
00:20:35,460 --> 00:20:39,650
found a slightly be killed by a shark

525
00:20:37,289 --> 00:20:39,649
attack

526
00:20:47,480 --> 00:20:56,900
control as I've done by emphasizing

527
00:21:14,069 --> 00:21:17,460
the universe

528
00:21:37,210 --> 00:21:41,710
these are the ways the world will end

529
00:21:45,250 --> 00:21:51,200
this is desiree host of Canadian radio

530
00:21:48,079 --> 00:21:53,178
show skeptically speaking for those of

531
00:21:51,200 --> 00:21:55,610
you that don't know Kenneth is quite

532
00:21:53,179 --> 00:21:57,980
similar to Australia people know is

533
00:21:55,609 --> 00:22:01,000
primarily for our weather and our beer

534
00:21:57,980 --> 00:22:05,000
and we have a queen just like you do

535
00:22:01,000 --> 00:22:07,308
same one as you do actually we also have

536
00:22:05,000 --> 00:22:09,650
mythical monsters and people who think

537
00:22:07,308 --> 00:22:11,119
they have psychic abilities and people

538
00:22:09,650 --> 00:22:14,059
who think that vaccinations are bad for

539
00:22:11,119 --> 00:22:16,158
you so keep listening to the skeptic

540
00:22:14,058 --> 00:22:18,339
zone and know that we're all in this

541
00:22:16,159 --> 00:22:18,340
together

542

00:22:23,979 --> 00:22:28,009
well i'm in that melbourne victoria

543
00:22:26,569 --> 00:22:30,048
visiting my good friend dr. steve

544
00:22:28,009 --> 00:22:32,649
roberts and steve has dragged me along

545
00:22:30,048 --> 00:22:35,479
quite willingly I must say to the famous

546
00:22:32,648 --> 00:22:37,158
Victoria Queen Victoria Martinez to lea

547
00:22:35,479 --> 00:22:39,588
market at top of it is of a street in

548
00:22:37,159 --> 00:22:42,199
Melbourne it's like a giant sheds or

549
00:22:39,588 --> 00:22:43,999
sheds i should say big tin roofs and

550
00:22:42,199 --> 00:22:45,739
they just stall out to store after store

551
00:22:43,999 --> 00:22:48,319
we're passing jeans at the moment

552
00:22:45,739 --> 00:22:51,169
there's some leather jackets ugg boots

553
00:22:48,319 --> 00:22:53,648
over there some some interesting clocks

554
00:22:51,169 --> 00:22:57,109
giant clocks here flags of all nations

555
00:22:53,648 --> 00:23:00,168
painting phone accessories number plates

556
00:22:57,108 --> 00:23:02,148

it goes on and on and on so I'm curious

557

00:23:00,169 --> 00:23:03,499

to see what we're going to find you can

558

00:23:02,148 --> 00:23:05,628

have your own number plate made up over

559

00:23:03,499 --> 00:23:09,288

here look at that you type it into the

560

00:23:05,628 --> 00:23:11,538

computer and away you go for fun Steve's

561

00:23:09,288 --> 00:23:16,219

toolshed little Viggo let's go feed your

562

00:23:11,538 --> 00:23:17,838

boobies yeah oh well let's let's dive

563

00:23:16,219 --> 00:23:20,048

into these markets and see what we can

564

00:23:17,838 --> 00:23:20,048

find

565

00:23:24,720 --> 00:23:29,950

we've come across a remarkable little

566

00:23:27,130 --> 00:23:31,480

store here they're selling a device you

567

00:23:29,950 --> 00:23:34,630

put over your ear it's called the

568

00:23:31,480 --> 00:23:37,450

genuine Ozzy protector ideal

569

00:23:34,630 --> 00:23:39,970

for use with politicians conspiracy

570

00:23:37,450 --> 00:23:42,819

theorists creationists nagging spouses

571
00:23:39,970 --> 00:23:45,160
used car salesman ex-girlfriend friends

572
00:23:42,819 --> 00:23:47,409
religious fanatics married men debtors

573
00:23:45,160 --> 00:23:53,048
tradesmen and many more and the website

574
00:23:47,410 --> 00:23:56,220
is www protected calm day you and your

575
00:23:53,048 --> 00:23:59,168
the lovely lady here at the stent

576
00:23:56,220 --> 00:24:00,789
selling this other stuff I i must admit

577
00:23:59,169 --> 00:24:05,169
that's a bitty pretty unusual thing to

578
00:24:00,789 --> 00:24:08,019
sell surprisingly very popular for

579
00:24:05,169 --> 00:24:10,179
people people by four at a time yeah

580
00:24:08,019 --> 00:24:11,950
head of a I've never seen anything like

581
00:24:10,179 --> 00:24:13,330
it it's really funny but you're also

582
00:24:11,950 --> 00:24:15,160
selling all sorts of wonderful other

583
00:24:13,329 --> 00:24:16,869
things like this is for getting rid of

584
00:24:15,160 --> 00:24:18,880
pet hairs is it yeah and bubbles off

585
00:24:16,869 --> 00:24:21,579
your clothes and ironing board covers

586
00:24:18,880 --> 00:24:22,990
everything and my friend I Steve Roberts

587
00:24:21,579 --> 00:24:24,250
is here she was just telling me that the

588
00:24:22,990 --> 00:24:26,019
the bull should protect his cell

589
00:24:24,250 --> 00:24:27,369
remarkably well Steve I shall think so

590
00:24:26,019 --> 00:24:30,579
as you can saw need for that kind of

591
00:24:27,369 --> 00:24:32,019
money someday maybe rush to the big

592
00:24:30,579 --> 00:24:33,579
marketing getting protector

593
00:24:32,019 --> 00:24:36,490
just what you need this what I hope they

594
00:24:33,579 --> 00:24:39,279
come in pairs under each here that reach

595
00:24:36,490 --> 00:24:41,940
in very handy oh thank you very much

596
00:24:39,279 --> 00:24:41,940
thank you

597
00:24:45,029 --> 00:24:51,549
Steve I wanted to have a quick word

598
00:24:47,529 --> 00:24:54,069
about your quiz dr. Bob's online quiz

599

00:24:51,549 --> 00:24:57,099
now this is a quiz specifically for

600
00:24:54,069 --> 00:24:58,689
skeptics well can you say that not for

601
00:24:57,099 --> 00:25:02,379
anybody who's the light heart of the

602
00:24:58,690 --> 00:25:03,640
likes of sense of fun right and what

603
00:25:02,380 --> 00:25:05,350
sort of questions you posed in New

604
00:25:03,640 --> 00:25:07,750
Orleans look I guess Phillip was setting

605
00:25:05,349 --> 00:25:10,149
an exam like you nosy earth young or old

606
00:25:07,750 --> 00:25:13,269
and if you say it's young you go all bad

607
00:25:10,150 --> 00:25:15,190
bad no point bad bad or if you say it's

608
00:25:13,269 --> 00:25:17,889
very old you yes very good one point

609
00:25:15,190 --> 00:25:19,210
Dean you know what so what so what I

610
00:25:17,890 --> 00:25:21,160
wanted to do is to ask questions that

611
00:25:19,210 --> 00:25:24,429
are extremely difficult yes you do have

612
00:25:21,160 --> 00:25:27,250
an answer but really I don't oppose as

613
00:25:24,429 --> 00:25:30,280

being a smartass so I just like to see

614

00:25:27,250 --> 00:25:31,890

Wheaton rip RT and a witty answer so the

615

00:25:30,279 --> 00:25:34,089

winner of your quiz each month is not

616

00:25:31,890 --> 00:25:35,980

necessarily who gets it right oh nice

617

00:25:34,089 --> 00:25:40,149

who gets the best answers regardless oh

618

00:25:35,980 --> 00:25:43,058

yeah well I already know the answer so

619

00:25:40,150 --> 00:25:45,730

it be some sunny sunny can put something

620

00:25:43,058 --> 00:25:49,509

witty you know um for example on the

621

00:25:45,730 --> 00:25:51,700

world land speed record in 1899 65 miles

622

00:25:49,509 --> 00:25:53,920

an hour what powered the vehicle that

623

00:25:51,700 --> 00:25:55,870

took his record yeah okay it was

624

00:25:53,920 --> 00:25:58,320

actually steam-powered and also

625

00:25:55,869 --> 00:26:02,279

electricity powered one in the same year

626

00:25:58,319 --> 00:26:05,769

but if somebody replied vanity or

627

00:26:02,279 --> 00:26:08,980

testosterone and it's not even really

628
00:26:05,769 --> 00:26:11,500
more accurately the real answer how was

629
00:26:08,980 --> 00:26:14,650
the sound of music edited for showing in

630
00:26:11,500 --> 00:26:18,849
South Korea I wasn't they cuddle the

631
00:26:14,650 --> 00:26:20,800
songs out it's too long there's are sort

632
00:26:18,849 --> 00:26:22,569
of things you like the Bob's quit the

633
00:26:20,799 --> 00:26:26,200
answer I got was on it is a

634
00:26:22,569 --> 00:26:30,009
insufficiently it is a with duct tape

635
00:26:26,200 --> 00:26:32,019
and a flamethrower North Korea so it

636
00:26:30,009 --> 00:26:33,400
really just people who send some fun and

637
00:26:32,019 --> 00:26:35,200
I published all the answers I get all

638
00:26:33,400 --> 00:26:37,090
the ones on the printable yeah up or

639
00:26:35,200 --> 00:26:38,470
down for interval yeah there's no prize

640
00:26:37,089 --> 00:26:40,629
when you see if it gives it just a sense

641
00:26:38,470 --> 00:26:42,370
of fun and very difficult questions and

642
00:26:40,630 --> 00:26:43,990
you can also see all the previous

643
00:26:42,369 --> 00:26:46,029
questions and all the previous answers

644
00:26:43,990 --> 00:26:48,299
and the winner gets their name put on

645
00:26:46,029 --> 00:26:50,279
your bored of your role of Honor my

646
00:26:48,299 --> 00:26:52,470
Olive on other sites and we could send a

647
00:26:50,279 --> 00:26:54,059
great skeptic CD or something so there

648
00:26:52,470 --> 00:26:57,120
are prizes occasionally look check out

649
00:26:54,059 --> 00:27:00,839
dr. Bob's skeptical or not so skeptical

650
00:26:57,119 --> 00:27:04,019
quiz and that's a ww skeptics calm day

651
00:27:00,839 --> 00:27:06,569
you / features and there you'll find dr.

652
00:27:04,019 --> 00:27:08,069
Bob's quiz that's right yeah I think I

653
00:27:06,569 --> 00:27:10,289
happy to engage in correspondence for

654
00:27:08,069 --> 00:27:12,000
people to send answers in as well so see

655
00:27:10,289 --> 00:27:20,519
if we can stamp dr. Bob thanks Steve

656

00:27:12,000 --> 00:27:24,089
thank you one of the things that

657
00:27:20,519 --> 00:27:26,220
interest me being here with the hundreds

658
00:27:24,089 --> 00:27:28,500
of little stalls are there are some

659
00:27:26,220 --> 00:27:33,690
selling what can only assume a Power

660
00:27:28,500 --> 00:27:37,440
Balance ripoffs the packaging is vastly

661
00:27:33,690 --> 00:27:40,710
inferior looks like photocopy paper

662
00:27:37,440 --> 00:27:42,720
almost but you know the power balance

663
00:27:40,710 --> 00:27:45,210
bands observe looks just as genuine is

664
00:27:42,720 --> 00:27:47,279
the so-called real item but they range

665
00:27:45,210 --> 00:27:49,049
anywhere from ten dollars back there for

666
00:27:47,279 --> 00:27:51,960
purple one to forty dollars around in

667
00:27:49,049 --> 00:27:54,149
another store so I guess some people

668
00:27:51,960 --> 00:27:57,390
here has simply bought consignments of

669
00:27:54,150 --> 00:27:59,670
them from somewhere and flogging them

670
00:27:57,390 --> 00:28:02,880

off here at the Victoria markets very

671

00:27:59,670 --> 00:28:06,120

interesting so there we pop silver flip

672

00:28:02,880 --> 00:28:11,000

off I say ripoffs of shonky device to

673

00:28:06,119 --> 00:28:11,000

begin with not genuine power balance

674

00:28:16,250 --> 00:28:20,599

what a great time it's been here just

675

00:28:18,049 --> 00:28:22,700

looking around the amazing stories of

676

00:28:20,599 --> 00:28:25,689

Victoria markets I also almost sound

677

00:28:22,700 --> 00:28:28,009

like I've been paid by the by the

678

00:28:25,690 --> 00:28:30,920

management here to spruik this place but

679

00:28:28,009 --> 00:28:32,390

it really is a fantastic morning to

680

00:28:30,920 --> 00:28:35,360

browse these shops because you'll never

681

00:28:32,390 --> 00:28:37,009

know what you'll find Steve Roberts is

682

00:28:35,359 --> 00:28:39,589

walking away with bag loads of goodies

683

00:28:37,009 --> 00:28:41,390

yeah you like all these souvenirs I

684

00:28:39,589 --> 00:28:46,069

didn't think I'd need I could spare

685
00:28:41,390 --> 00:28:48,830
Timmy levitus panel and a web camera for

686
00:28:46,069 --> 00:28:51,500
the computer and my auntie

687
00:28:48,829 --> 00:28:52,669
stickers of course a very handy all

688
00:28:51,500 --> 00:28:55,220
sorts of stuff I never really knew I

689
00:28:52,670 --> 00:28:58,250
need it but I've got it now well I think

690
00:28:55,220 --> 00:29:00,589
it's the universal truth is you don't

691
00:28:58,250 --> 00:29:02,869
really see things in your own city until

692
00:29:00,589 --> 00:29:04,309
somebody comes to visit and they say

693
00:29:02,869 --> 00:29:08,389
let's go out and do this so let's get

694
00:29:04,309 --> 00:29:10,849
into that obvious oh yeah and have to be

695
00:29:08,390 --> 00:29:14,360
open to there's all sorts of stalls here

696
00:29:10,849 --> 00:29:16,519
mechanical and clothes and food and Lulu

697
00:29:14,359 --> 00:29:19,149
stuff and uniting it's all here of

698
00:29:16,519 --> 00:29:24,139
course we passed a little stall of a

699
00:29:19,150 --> 00:29:26,240
psychic tarot card reader and where they

700
00:29:24,140 --> 00:29:27,800
sense things from touching the object so

701
00:29:26,240 --> 00:29:30,470
I comment psychometry the word escape

702
00:29:27,799 --> 00:29:32,059
from psychometry that's right so yet

703
00:29:30,470 --> 00:29:33,559
Melbourne people if you haven't been to

704
00:29:32,059 --> 00:29:35,210
your Victorian markets in a while now is

705
00:29:33,559 --> 00:29:37,029
the time to do it and if you're visiting

706
00:29:35,210 --> 00:29:40,480
Melbourne I can thoroughly recommend

707
00:29:37,029 --> 00:29:40,480
it's great fun

708
00:29:49,880 --> 00:29:56,220
so that's why you can't eat her I was

709
00:29:54,029 --> 00:29:57,149
just talking to the students here and

710
00:29:56,220 --> 00:30:00,059
look I'm supposed to tell you about

711
00:29:57,150 --> 00:30:03,780
something the cosmic tea party I new

712
00:30:00,059 --> 00:30:05,159
science podcast podcast hey who's it at

713

00:30:03,779 --> 00:30:07,889
any rate it's about science and

714
00:30:05,160 --> 00:30:11,250
mathematics sounds rather dull oh hang

715
00:30:07,890 --> 00:30:12,870
on hang on it and says here not done so

716
00:30:11,250 --> 00:30:16,589
there you have it the cosmic tea party

717
00:30:12,869 --> 00:30:23,519
podcast www cosmic Tea Party or or

718
00:30:16,589 --> 00:30:26,490
search for them one I choose now it's

719
00:30:23,519 --> 00:30:32,190
time for dr. Rachel reports with dr.

720
00:30:26,490 --> 00:30:33,930
Rachel Dunlop final part of a British

721
00:30:32,190 --> 00:30:36,390
Medical Journal investigation has been

722
00:30:33,930 --> 00:30:37,920
published debunking research by andrew

723
00:30:36,390 --> 00:30:40,620
wakefield which claimed a link between

724
00:30:37,920 --> 00:30:42,930
autism and the MMR vaccine given to

725
00:30:40,619 --> 00:30:45,359
children the journal denounces the study

726
00:30:42,930 --> 00:30:47,310
as an elaborate fraud but Wakefield says

727
00:30:45,359 --> 00:30:49,889

it's trying to crush valid probes into

728

00:30:47,309 --> 00:30:51,509

immunization Wakefield's research led

729

00:30:49,890 --> 00:30:53,190

many parents to stop vaccinating their

730

00:30:51,509 --> 00:30:55,129

children and is still cited by

731

00:30:53,190 --> 00:30:57,240

anti-vaccination groups around the world

732

00:30:55,130 --> 00:30:59,250

dr. rachel Dunlop is a research

733

00:30:57,240 --> 00:31:00,660

scientist and a member of the Australian

734

00:30:59,250 --> 00:31:03,329

skeptics she has written extensively

735

00:31:00,660 --> 00:31:04,680

about the Wakefield case on her blog and

736

00:31:03,329 --> 00:31:06,149

she joins us now Rachel thanks for

737

00:31:04,680 --> 00:31:08,310

coming on the drum thanks for having mr.

738

00:31:06,150 --> 00:31:09,900

now let's go back to the case of andrew

739

00:31:08,309 --> 00:31:11,549

wakefield what did he do when did it

740

00:31:09,900 --> 00:31:13,530

when did this all start before we get

741

00:31:11,549 --> 00:31:15,629

into the medical journal publications

742
00:31:13,529 --> 00:31:17,789
tell us a bit more about Wakefield sure

743
00:31:15,630 --> 00:31:20,870
well the paper was published in 1998 in

744
00:31:17,789 --> 00:31:23,670
The Lancet and it covered 12 children

745
00:31:20,869 --> 00:31:25,859
who Wakefield was trying to demonstrate

746
00:31:23,670 --> 00:31:28,289
this new disorder called autistic

747
00:31:25,859 --> 00:31:31,019
colitis which is a disease of the

748
00:31:28,289 --> 00:31:33,299
gastrointestinal tract and so he did

749
00:31:31,019 --> 00:31:36,000
this study looking at these 12 children

750
00:31:33,299 --> 00:31:37,680
and then what happened was in fact in

751
00:31:36,000 --> 00:31:40,529
the study it didn't look at a link

752
00:31:37,680 --> 00:31:42,269
between autism and vaccination but he

753
00:31:40,529 --> 00:31:44,849
had a subsequent press conference after

754
00:31:42,269 --> 00:31:47,549
the study was released and this is where

755
00:31:44,849 --> 00:31:50,609
the whole sort of vaccines and MMR cause

756
00:31:47,549 --> 00:31:52,649
autism began and it sort of got taken on

757
00:31:50,609 --> 00:31:54,839
by the media particularly in the UK and

758
00:31:52,650 --> 00:31:57,180
spread across the world and it created

759
00:31:54,839 --> 00:31:58,859
this vaccine scare which we

760
00:31:57,180 --> 00:32:01,200
today which is that many parents think

761
00:31:58,859 --> 00:32:03,349
for vaccines so what direct influence to

762
00:32:01,200 --> 00:32:06,259
Wakefield have on childhood vaccinations

763
00:32:03,349 --> 00:32:08,339
uh well vaccination rates dropped

764
00:32:06,259 --> 00:32:10,890
particularly the MMR which is the

765
00:32:08,339 --> 00:32:13,740
measles mumps rubella vaccine in in the

766
00:32:10,890 --> 00:32:15,660
UK for example after his study was

767
00:32:13,740 --> 00:32:18,509
released levels dropped to about

768
00:32:15,660 --> 00:32:20,700
seventy-nine percent now it's required

769
00:32:18,509 --> 00:32:22,289
about ninety two percent of people have

770

00:32:20,700 --> 00:32:24,509
to be vaccinated to have this some

771
00:32:22,289 --> 00:32:26,819
process called herd immunity and

772
00:32:24,509 --> 00:32:28,109
basically that means that if a lot of

773
00:32:26,819 --> 00:32:30,659
people in the community are vaccinated

774
00:32:28,109 --> 00:32:33,929
then when we get viruses or bacteria

775
00:32:30,660 --> 00:32:35,700
into the community they can't spread and

776
00:32:33,930 --> 00:32:37,470
in some parts of London in fact our

777
00:32:35,700 --> 00:32:40,470
vaccination levels drop to as low as

778
00:32:37,470 --> 00:32:41,730
fifty percent so what what what impact

779
00:32:40,470 --> 00:32:43,890
did that have on these kind of diseases

780
00:32:41,730 --> 00:32:45,569
coming back in well it had an impact on

781
00:32:43,890 --> 00:32:47,700
measles coming back in the UK in

782
00:32:45,569 --> 00:32:49,529
particular and children getting stick in

783
00:32:47,700 --> 00:32:52,650
some children tragically dying as a

784
00:32:49,529 --> 00:32:54,569

result so yeah he had a big impact on

785

00:32:52,650 --> 00:32:56,130

the levels of vaccination rates after he

786

00:32:54,569 --> 00:32:57,599

released his paper well let's deal with

787

00:32:56,130 --> 00:32:59,280

the three part series that the British

788

00:32:57,599 --> 00:33:00,990

Medical Journal has just released and

789

00:32:59,279 --> 00:33:04,649

the last version of that has just been

790

00:33:00,990 --> 00:33:06,750

published now they say that Wakefield is

791

00:33:04,650 --> 00:33:08,370

guilty of an elaborate fraud now that's

792

00:33:06,750 --> 00:33:10,410

just not you know making mistakes

793

00:33:08,369 --> 00:33:11,849

elaborate fraud is very strong language

794

00:33:10,410 --> 00:33:15,120

why are they using that kind of language

795

00:33:11,849 --> 00:33:18,359

yeah well I guess before this these

796

00:33:15,119 --> 00:33:20,279

three publications were put out by the

797

00:33:18,359 --> 00:33:22,889

bmj which was in the last week and a

798

00:33:20,279 --> 00:33:25,079

half we thought that perhaps it was bad

799
00:33:22,890 --> 00:33:27,540
science whereby perhaps Wakefield had

800
00:33:25,079 --> 00:33:29,939
massaged the statistics a little bit or

801
00:33:27,539 --> 00:33:31,889
misinterpreted the data a little bit but

802
00:33:29,940 --> 00:33:33,390
the research that Bryan dear did and

803
00:33:31,890 --> 00:33:35,430
he's an investigative journalist who

804
00:33:33,390 --> 00:33:37,770
published this these three things in the

805
00:33:35,430 --> 00:33:39,960
bmj he spent seven years researching

806
00:33:37,769 --> 00:33:43,619
this case and he was able to show that

807
00:33:39,960 --> 00:33:45,380
in fact Wakefield made up clinical

808
00:33:43,619 --> 00:33:47,519
records of the children in the study

809
00:33:45,380 --> 00:33:49,530
those 12 children that you mentioned

810
00:33:47,519 --> 00:33:51,269
before that's correct so the 12 children

811
00:33:49,529 --> 00:33:52,829
in that study when deer went back and

812
00:33:51,269 --> 00:33:54,779
checked the records at the hospital

813
00:33:52,829 --> 00:33:58,230
where they originally came and were

814
00:33:54,779 --> 00:33:59,399
diagnosed or tested on didn't match the

815
00:33:58,230 --> 00:34:02,490
information that was in the paper

816
00:33:59,400 --> 00:34:05,070
whatsoever it turned out also that most

817
00:34:02,490 --> 00:34:06,930
of the children that Wakefield said were

818
00:34:05,069 --> 00:34:08,838
autistic that he studied in this paper

819
00:34:06,930 --> 00:34:10,398
weren't autistic

820
00:34:08,838 --> 00:34:11,690
it turned out that some of the studies

821
00:34:10,398 --> 00:34:13,398
that he did he did some pathology

822
00:34:11,690 --> 00:34:15,528
studies where he took tissue from the

823
00:34:13,398 --> 00:34:18,108
kids collins to look for increased

824
00:34:15,528 --> 00:34:19,969
levels of measles virus those slides

825
00:34:18,108 --> 00:34:22,608
could never be found so that data

826
00:34:19,969 --> 00:34:24,048
couldn't be reproduced and of course

827

00:34:22,608 --> 00:34:26,239
there's always something behind this

828
00:34:24,048 --> 00:34:28,338
stuff Steven that's you know he was you

829
00:34:26,239 --> 00:34:29,838
know for money basically so tell us what

830
00:34:28,338 --> 00:34:31,878
tell us about that tell us what the

831
00:34:29,838 --> 00:34:34,909
Bryant dear the journalist found out

832
00:34:31,878 --> 00:34:38,028
about Wakefield's financial incentive to

833
00:34:34,909 --> 00:34:40,009
why what he did well I mean I'm a

834
00:34:38,028 --> 00:34:41,719
research scientist myself and when I

835
00:34:40,009 --> 00:34:43,278
read this stuff last week I didn't think

836
00:34:41,719 --> 00:34:45,950
it could be as bad as it is it's really

837
00:34:43,278 --> 00:34:49,460
really bad I mean we knew that Wakefield

838
00:34:45,949 --> 00:34:51,138
was employed by a lawyer back in 1998

839
00:34:49,460 --> 00:34:53,719
and he was putting this lawyer was

840
00:34:51,139 --> 00:34:55,608
putting together a case to show that the

841
00:34:53,719 --> 00:34:58,489

MMR vaccine was dangerous and so

842

00:34:55,608 --> 00:35:01,219

Wakefield was being paid 150 quid an

843

00:34:58,489 --> 00:35:03,349

hour by these lawyers as an expert and

844

00:35:01,219 --> 00:35:05,960

didn't he end up getting over 400,000

845

00:35:03,349 --> 00:35:08,509

British pounds for you yeah and I do too

846

00:35:05,960 --> 00:35:10,429

conversion today and that comes to 696

847

00:35:08,509 --> 00:35:13,309

thousand australian dollars so it's not

848

00:35:10,429 --> 00:35:15,528

small bicky's in addition to that he had

849

00:35:13,309 --> 00:35:17,930

a patent when he'd submitted for a

850

00:35:15,528 --> 00:35:19,630

measles vaccine because what he was

851

00:35:17,929 --> 00:35:22,159

trying to show is that the triple

852

00:35:19,630 --> 00:35:24,079

injection was dangerous so if he could

853

00:35:22,159 --> 00:35:25,788

show that through this paper and he had

854

00:35:24,079 --> 00:35:27,229

a patent on a singles measles vaccine

855

00:35:25,789 --> 00:35:28,969

that he could say but I've got the

856
00:35:27,228 --> 00:35:32,210
solution over here here is the single

857
00:35:28,969 --> 00:35:33,469
one by mine but in fact that's a you

858
00:35:32,210 --> 00:35:35,478
know we're talking about a million

859
00:35:33,469 --> 00:35:37,309
dollars st but it's much much worse than

860
00:35:35,478 --> 00:35:39,318
that and what dear was able to find

861
00:35:37,309 --> 00:35:42,079
which is what he published last week was

862
00:35:39,318 --> 00:35:45,259
that also Wakefield had plans he had a

863
00:35:42,079 --> 00:35:48,289
business plan to develop a test to look

864
00:35:45,259 --> 00:35:50,719
for this disorder in children that his

865
00:35:48,289 --> 00:35:53,719
test was potentially going to be making

866
00:35:50,719 --> 00:35:56,929
his company about 72 million pounds a

867
00:35:53,719 --> 00:35:58,940
year that is no we're not talking small

868
00:35:56,929 --> 00:36:01,058
B he's here okay well Anderson Cooper

869
00:35:58,940 --> 00:36:03,889
did an interview with andrew wakefield

870
00:36:01,059 --> 00:36:06,229
recently on CNN and here is what Andrew

871
00:36:03,889 --> 00:36:08,509
Wakefield said in defense of himself

872
00:36:06,228 --> 00:36:09,798
after this the first our first couple of

873
00:36:08,509 --> 00:36:12,498
the articles were published by the

874
00:36:09,798 --> 00:36:14,630
British Medical Journal cheers is a

875
00:36:12,498 --> 00:36:17,659
ruthless pragmatic attempt to crush any

876
00:36:14,630 --> 00:36:19,789
investigation into valid vaccine safety

877
00:36:17,659 --> 00:36:22,129
concerns not just my concerns i'm here

878
00:36:19,789 --> 00:36:24,079
at a meeting of experts on vaccines but

879
00:36:22,130 --> 00:36:25,670
around the world who are extremely

880
00:36:24,079 --> 00:36:28,068
concerned about the safety of vaccines

881
00:36:25,670 --> 00:36:30,470
and the barrage but they believe and i

882
00:36:28,068 --> 00:36:32,199
believe is being done to children so

883
00:36:30,469 --> 00:36:34,278
Wakefield there is trying to say that

884

00:36:32,199 --> 00:36:36,469
the journal the British Medical Journal

885
00:36:34,278 --> 00:36:38,119
is trying to crush valid investigations

886
00:36:36,469 --> 00:36:41,088
into vaccines he also said in that

887
00:36:38,119 --> 00:36:42,798
interview that the journalist brian dia

888
00:36:41,088 --> 00:36:45,828
is a hit man he described it as a hit

889
00:36:42,798 --> 00:36:47,989
man yeah well I think I mean Wakefield

890
00:36:45,829 --> 00:36:50,000
saying that this is an attempt to quash

891
00:36:47,989 --> 00:36:52,669
valid research into vaccines is

892
00:36:50,000 --> 00:36:54,528
absolutely false um for 13 years now

893
00:36:52,670 --> 00:36:56,389
science has been concentrating on trying

894
00:36:54,528 --> 00:36:58,579
to find this link between vaccines and

895
00:36:56,389 --> 00:37:01,460
autism because Wakefield published this

896
00:36:58,579 --> 00:37:03,470
in 1998 so 13 years of science have been

897
00:37:01,460 --> 00:37:05,000
spent looking into this link lots and

898
00:37:03,469 --> 00:37:07,129

lots of studies have been done and has

899

00:37:05,000 --> 00:37:09,048

there's been no evidence found Steve so

900

00:37:07,130 --> 00:37:12,108

in fact we've diverted our attention

901

00:37:09,048 --> 00:37:15,318

from looking at the causes of autism

902

00:37:12,108 --> 00:37:18,170

into debunking what Wakefield did okay i

903

00:37:15,318 --> 00:37:19,489

want to ask this question in relation to

904

00:37:18,170 --> 00:37:21,740

that because the Australian vaccination

905

00:37:19,489 --> 00:37:23,118

networker anti-vaccination organization

906

00:37:21,739 --> 00:37:25,098

they have a website on their website

907

00:37:23,119 --> 00:37:27,140

they refer to Wakefield in the British

908

00:37:25,099 --> 00:37:28,490

medical journal articles and they say

909

00:37:27,139 --> 00:37:30,920

that Wakefield's results have been

910

00:37:28,489 --> 00:37:32,328

verified and re-evaluated many times in

911

00:37:30,920 --> 00:37:34,519

the years since that first study was

912

00:37:32,329 --> 00:37:36,109

published in 1998 yeah this is something

913
00:37:34,518 --> 00:37:37,578
Wakefield says as well he says that

914
00:37:36,108 --> 00:37:39,828
there have been five studies done

915
00:37:37,579 --> 00:37:42,289
internationally that repeated or

916
00:37:39,829 --> 00:37:45,170
reproduced his work one of those studies

917
00:37:42,289 --> 00:37:47,240
was done by a white one of Wakefield's

918
00:37:45,170 --> 00:37:49,700
colleagues and published in a journal on

919
00:37:47,239 --> 00:37:52,189
which Wakefield was an editor so there's

920
00:37:49,699 --> 00:37:53,689
a big conflict of interest air as to

921
00:37:52,190 --> 00:37:56,059
whether or not you know that's a valid

922
00:37:53,690 --> 00:37:57,108
study one of them was an abstract which

923
00:37:56,059 --> 00:37:59,539
means it was presented at a conference

924
00:37:57,108 --> 00:38:01,460
but never published a couple of them

925
00:37:59,539 --> 00:38:05,059
were case studies on one or two people

926
00:38:01,460 --> 00:38:06,798
and one of them did a reasonable study

927
00:38:05,059 --> 00:38:07,880
and showed that there was no link so I'm

928
00:38:06,798 --> 00:38:10,159
not quite sure where they get that

929
00:38:07,880 --> 00:38:11,930
information okay the ABN also say once

930
00:38:10,159 --> 00:38:14,598
again the media in response to these

931
00:38:11,929 --> 00:38:15,828
these bmj articles once again the media

932
00:38:14,599 --> 00:38:17,838
is marching to the tune of their

933
00:38:15,829 --> 00:38:19,789
advertisers and goose stepping across

934
00:38:17,838 --> 00:38:23,389
the truth without any regard to what

935
00:38:19,789 --> 00:38:24,500
actually happened well if you look at

936
00:38:23,389 --> 00:38:27,038
what the studies that have been done

937
00:38:24,500 --> 00:38:30,278
since wakeful published The Lancet paper

938
00:38:27,039 --> 00:38:33,380
for example there was a study done in

939
00:38:30,278 --> 00:38:35,300
Denmark that looked at about 500,000

940
00:38:33,380 --> 00:38:37,369
children and looked

941

00:38:35,300 --> 00:38:39,980
vaccinated versus unvaccinated and found

942
00:38:37,369 --> 00:38:41,630
there was no increase in MMR in Japan

943
00:38:39,980 --> 00:38:44,300
they stopped using the MMR for a long

944
00:38:41,630 --> 00:38:47,780
time and the rates of autism continue to

945
00:38:44,300 --> 00:38:49,670
increase some of the components of

946
00:38:47,780 --> 00:38:51,590
vaccines that people like the avian

947
00:38:49,670 --> 00:38:55,099
claim cause autism were taken out of

948
00:38:51,590 --> 00:38:57,740
vaccines in the year 2000 2001 but MMR

949
00:38:55,099 --> 00:38:59,839
sorry autism rates continue to go up so

950
00:38:57,739 --> 00:39:01,459
it's clear that there's nothing to do

951
00:38:59,840 --> 00:39:04,430
with the vaccination timbira you got a

952
00:39:01,460 --> 00:39:06,860
question or a comment I guess I'm panic

953
00:39:04,429 --> 00:39:08,449
just anecdotal he's a doctor I didn't

954
00:39:06,860 --> 00:39:11,360
certainly working in Sydney or out of

955
00:39:08,449 --> 00:39:12,589

Sydney thankfully as large as this was

956

00:39:11,360 --> 00:39:15,620

in Britain I didn't get the impression

957

00:39:12,590 --> 00:39:17,570

that had kind of spread to any lengths

958

00:39:15,619 --> 00:39:18,859

at least in metropolitan Sydney I know

959

00:39:17,570 --> 00:39:20,390

there are certainly sections of

960

00:39:18,860 --> 00:39:23,180

Australia but I would be curious to know

961

00:39:20,389 --> 00:39:25,909

about statistics was there any drop in

962

00:39:23,179 --> 00:39:27,710

vaccination rates in Australia not

963

00:39:25,909 --> 00:39:29,719

really it didn't affect Australia as

964

00:39:27,710 --> 00:39:31,250

much as it did the UK I mean we only

965

00:39:29,719 --> 00:39:33,109

have about two or three percent of

966

00:39:31,250 --> 00:39:34,429

parents in this country that refused to

967

00:39:33,110 --> 00:39:37,849

vaccinate all together it's quite a

968

00:39:34,429 --> 00:39:40,219

small number it hasn't changed much so

969

00:39:37,849 --> 00:39:42,469

it really was a big problem much more in

970
00:39:40,219 --> 00:39:45,980
the United States and also in the UK I

971
00:39:42,469 --> 00:39:48,889
mean my I guess comment on this is a

972
00:39:45,980 --> 00:39:50,780
couple of things one I think there is a

973
00:39:48,889 --> 00:39:53,299
segment of the community generally that

974
00:39:50,780 --> 00:39:56,390
would be suspicious of science modern

975
00:39:53,300 --> 00:39:58,070
medicine etc would look to hence the

976
00:39:56,389 --> 00:39:59,480
rise in alternative medicine secular

977
00:39:58,070 --> 00:40:00,650
spiritualities so this sort of

978
00:39:59,480 --> 00:40:03,619
information would be particularly

979
00:40:00,650 --> 00:40:07,160
attractive to that group second it kept

980
00:40:03,619 --> 00:40:09,319
this these sort of events it demeans the

981
00:40:07,159 --> 00:40:11,480
quality of science to the public who

982
00:40:09,320 --> 00:40:13,130
already have a very poor understanding

983
00:40:11,480 --> 00:40:14,420
of science and you know climate change

984
00:40:13,130 --> 00:40:17,090
is a great example so increasingly

985
00:40:14,420 --> 00:40:19,639
people will question just the validity

986
00:40:17,090 --> 00:40:23,450
of trials in general so I think it's

987
00:40:19,639 --> 00:40:25,460
very damaging this caper for scientific

988
00:40:23,449 --> 00:40:27,710
discourse in in the in the public realm

989
00:40:25,460 --> 00:40:30,530
Carey I've just got a comment and that

990
00:40:27,710 --> 00:40:33,559
is as the mother of a child who was

991
00:40:30,530 --> 00:40:37,070
vector vaccinated but who still got

992
00:40:33,559 --> 00:40:39,679
measles my only comment is that the

993
00:40:37,070 --> 00:40:41,750
doctors said to me see how sick she is

994
00:40:39,679 --> 00:40:43,159
can you imagine how much sicker she

995
00:40:41,750 --> 00:40:45,320
would have been if she hadn't been

996
00:40:43,159 --> 00:40:47,509
vaccinated so I actually don't

997
00:40:45,320 --> 00:40:48,650
understand why anyone wouldn't vaccinate

998

00:40:47,510 --> 00:40:50,119
their children

999
00:40:48,650 --> 00:40:52,490
I just think it's one of these things

1000
00:40:50,119 --> 00:40:54,980
which we are as parents we should all be

1001
00:40:52,489 --> 00:40:57,078
doing and I really I mean I think you

1002
00:40:54,980 --> 00:40:59,449
know the fact that kids who get measles

1003
00:40:57,079 --> 00:41:01,609
get as sick as okay as they do and they

1004
00:40:59,449 --> 00:41:03,318
can die hmm I just think it's an

1005
00:41:01,608 --> 00:41:04,788
obligation on every responsible parent

1006
00:41:03,318 --> 00:41:06,288
to vaccinate their kids and I don't know

1007
00:41:04,789 --> 00:41:07,970
anything about the sides I just know how

1008
00:41:06,289 --> 00:41:10,010
six Lisa was in the history of health

1009
00:41:07,969 --> 00:41:11,629
care clean water and vaccinations are

1010
00:41:10,010 --> 00:41:23,778
probably to the biggest things that have

1011
00:41:11,630 --> 00:41:26,630
save lives this is brian dunning from

1012
00:41:23,778 --> 00:41:30,250

the sceptile cast been enjoying your

1013

00:41:26,630 --> 00:41:33,349

critical thinking shows in audio only

1014

00:41:30,250 --> 00:41:37,150

you've been missing half the fun check

1015

00:41:33,349 --> 00:41:41,798

out my new video podcast in fact on

1016

00:41:37,150 --> 00:41:45,289

itunes or click it on skep tied com3

1017

00:41:41,798 --> 00:41:47,599

pilot episodes of in fact are available

1018

00:41:45,289 --> 00:41:49,369

now for immediate viewing I'm looking

1019

00:41:47,599 --> 00:41:51,588

for sponsorship to produce an entire

1020

00:41:49,369 --> 00:41:54,170

first season of 13 episodes and

1021

00:41:51,588 --> 00:41:56,808

hopefully many more seasons to follow

1022

00:41:54,170 --> 00:41:58,608

you can see the whole lineup and get all

1023

00:41:56,809 --> 00:42:02,380

the other nuts and bolts if you go to

1024

00:41:58,608 --> 00:42:05,210

skep tide come and click on in fact and

1025

00:42:02,380 --> 00:42:08,480

don't forget to come back to the skeptic

1026

00:42:05,210 --> 00:42:11,809

zone when you're done watching I I think

1027
00:42:08,480 --> 00:42:14,298
it's audio only but that's okay I still

1028
00:42:11,809 --> 00:42:20,660
like it this is brian dunning from

1029
00:42:14,298 --> 00:42:25,119
sceptile calm join us now for drinking

1030
00:42:20,659 --> 00:42:25,118
skeptically in the think tank

1031
00:42:29,610 --> 00:42:35,559
and that clinking folks you can hear in

1032
00:42:33,489 --> 00:42:37,329
the best stop it stick the clinking here

1033
00:42:35,559 --> 00:42:38,920
you can hear in the background is people

1034
00:42:37,329 --> 00:42:40,989
here in Melbourne trying desperately

1035
00:42:38,920 --> 00:42:44,320
trying to copy what we do in Sydney with

1036
00:42:40,989 --> 00:42:45,639
the thank you would the the think tank

1037
00:42:44,320 --> 00:42:47,440
and i'd like to welcome everybody here

1038
00:42:45,639 --> 00:42:49,420
at the table to the melbourne think tank

1039
00:42:47,440 --> 00:42:53,829
it's very exciting we're sitting out

1040
00:42:49,420 --> 00:42:55,690
here as the giant umbrella clothes away

1041
00:42:53,829 --> 00:42:57,759
above our heads i'm here with steve

1042
00:42:55,690 --> 00:42:59,619
roberts hi Steve hi Richard how are you

1043
00:42:57,760 --> 00:43:00,910
going I'm doing well and thank you for

1044
00:42:59,619 --> 00:43:02,559
hosting me down here in Melbourne I'm

1045
00:43:00,909 --> 00:43:04,719
always glad to see you here so thank you

1046
00:43:02,559 --> 00:43:07,719
and thank you for the lovely barbecue

1047
00:43:04,719 --> 00:43:10,299
are about to have oh well yes it was see

1048
00:43:07,719 --> 00:43:11,649
that comes out silly goodness yeah but I

1049
00:43:10,300 --> 00:43:16,960
love having you here so best laugh I've

1050
00:43:11,650 --> 00:43:18,519
had four weeks I see no I'll get

1051
00:43:16,960 --> 00:43:21,429
everybody around the table to introduce

1052
00:43:18,519 --> 00:43:23,289
themselves hi I'm Chris Higgins the

1053
00:43:21,429 --> 00:43:26,589
famous Chris Higgins very very famous

1054
00:43:23,289 --> 00:43:28,779
who who is looking after James Randi of

1055

00:43:26,590 --> 00:43:31,780
course during town well we say looking

1056
00:43:28,780 --> 00:43:34,030
after it was I can't really mention it

1057
00:43:31,780 --> 00:43:37,180
it's it's classified I see ya nice to

1058
00:43:34,030 --> 00:43:38,740
meet you but it was yeah I know you had

1059
00:43:37,179 --> 00:43:40,480
a wonderful time of town Australia we

1060
00:43:38,739 --> 00:43:42,519
are and certainly working with james

1061
00:43:40,480 --> 00:43:45,490
randi i had a really really good time it

1062
00:43:42,519 --> 00:43:47,349
was a really unique sort of perspective

1063
00:43:45,489 --> 00:43:51,129
on how the whole thing works over there

1064
00:43:47,349 --> 00:43:53,380
and what he gets up to okay and we have

1065
00:43:51,130 --> 00:43:55,090
no mouth occurs here from the Victorian

1066
00:43:53,380 --> 00:43:56,650
skeptics mal Vickers from the Victorian

1067
00:43:55,090 --> 00:44:00,820
skeptics great to see you coming along

1068
00:43:56,650 --> 00:44:02,889
here today and I must thank you you and

1069
00:44:00,820 --> 00:44:06,460

group of people took some of us to a

1070

00:44:02,889 --> 00:44:07,960

wildlife park a few months back after

1071

00:44:06,460 --> 00:44:10,090

Tammy Australia so it's a lovely place

1072

00:44:07,960 --> 00:44:12,070

yeah yeah the rain held off for us

1073

00:44:10,090 --> 00:44:14,019

during the days it was great it was

1074

00:44:12,070 --> 00:44:17,400

great and just to tell everybody your

1075

00:44:14,019 --> 00:44:21,460

position in the Victorian skeptics is um

1076

00:44:17,400 --> 00:44:24,789

general dogsbody all look after the

1077

00:44:21,460 --> 00:44:26,920

website mainly okay yeah partly

1078

00:44:24,789 --> 00:44:29,500

responsible for that partly responsible

1079

00:44:26,920 --> 00:44:31,720

and of course the dear old friend of

1080

00:44:29,500 --> 00:44:33,789

mine Rose me hello rose me hello Richard

1081

00:44:31,719 --> 00:44:35,439

good to see you thank you now we've

1082

00:44:33,789 --> 00:44:37,989

known each other for many years actually

1083

00:44:35,440 --> 00:44:39,670

you've been involved in the The

1084
00:44:37,989 --> 00:44:40,979
Skeptical movement for quite some time I

1085
00:44:39,670 --> 00:44:42,869
don't even know

1086
00:44:40,980 --> 00:44:44,130
or remember when we met it must have

1087
00:44:42,869 --> 00:44:47,510
been 10 years ago or something at least

1088
00:44:44,130 --> 00:44:52,349
would have been yes back in the late

1089
00:44:47,510 --> 00:44:53,970
1990s possibly yes and sitting at the

1090
00:44:52,349 --> 00:44:55,980
end of the table somebody who Twitter

1091
00:44:53,969 --> 00:44:59,730
followers would probably know very well

1092
00:44:55,980 --> 00:45:02,429
under the tag of postie Lindley it's

1093
00:44:59,730 --> 00:45:04,469
we're posting lindley for the lone

1094
00:45:02,429 --> 00:45:07,399
deranged ER the loans Reggie wait a

1095
00:45:04,469 --> 00:45:09,899
minute wait a minute hear that music

1096
00:45:07,400 --> 00:45:13,130
there we are it's her theme song folks

1097
00:45:09,900 --> 00:45:16,380
the lone deranged of posted Lili hello

1098
00:45:13,130 --> 00:45:18,150
I'm well I'm embarrassed because just a

1099
00:45:16,380 --> 00:45:20,070
little while ago we had a lovely chat in

1100
00:45:18,150 --> 00:45:24,960
an interview and then I said oh it

1101
00:45:20,070 --> 00:45:26,760
didn't record yeah so she's not very

1102
00:45:24,960 --> 00:45:28,530
happy with me but we were discussing all

1103
00:45:26,760 --> 00:45:30,780
sorts of wonderful things about your

1104
00:45:28,530 --> 00:45:33,090
getting into skepticism and how you're

1105
00:45:30,780 --> 00:45:35,310
discovering this amazing world of

1106
00:45:33,090 --> 00:45:37,559
like-minded people and you're making

1107
00:45:35,309 --> 00:45:39,269
some really great contacts did something

1108
00:45:37,559 --> 00:45:43,440
I've been into for a hell of a long time

1109
00:45:39,269 --> 00:45:46,199
since a primary school high school the

1110
00:45:43,440 --> 00:45:49,260
teachers teaching me skepticism through

1111
00:45:46,199 --> 00:45:50,759
choice magazine but um it's only now

1112

00:45:49,260 --> 00:45:52,740
that I've actually found out this

1113
00:45:50,760 --> 00:45:55,109
obviously we all know these other people

1114
00:45:52,739 --> 00:45:58,009
into it but getting on social networks

1115
00:45:55,108 --> 00:46:00,599
and actually being able to talk about it

1116
00:45:58,010 --> 00:46:05,960
going to Tam and meeting up with people

1117
00:46:00,599 --> 00:46:05,960
who are younger maybe not so old she

1118
00:46:06,260 --> 00:46:12,060
cheats you glance and I at me then folks

1119
00:46:08,969 --> 00:46:13,709
I must say oh dear Steve like we do with

1120
00:46:12,059 --> 00:46:15,329
these young people we do follow the same

1121
00:46:13,710 --> 00:46:16,710
band actually mean later you would just

1122
00:46:15,329 --> 00:46:20,400
find just going to be do follow the same

1123
00:46:16,710 --> 00:46:23,519
band hot wind yeah so there there's a

1124
00:46:20,400 --> 00:46:26,690
thing they must be about 70 vinyl silver

1125
00:46:23,519 --> 00:46:30,329
machine we're going to listen to that

1126
00:46:26,690 --> 00:46:35,070

Zimmer frame she'll never friend now I'm

1127

00:46:30,329 --> 00:46:37,980

a little she so but idea we haven't even

1128

00:46:35,070 --> 00:46:39,660

begun drinking it you had a wonderful

1129

00:46:37,980 --> 00:46:41,880

time at chemistry you're telling me

1130

00:46:39,659 --> 00:46:43,920

earlier along with christina and i hope

1131

00:46:41,880 --> 00:46:45,780

most of the people who came along and

1132

00:46:43,920 --> 00:46:48,000

you were telling me all sorts of stories

1133

00:46:45,780 --> 00:46:50,720

about the night you were went to the

1134

00:46:48,000 --> 00:46:54,050

karaoke karaoke with a

1135

00:46:50,719 --> 00:46:57,679

Croucher brothers and I went there with

1136

00:46:54,050 --> 00:46:59,510

my friend Frankie james and i think you

1137

00:46:57,679 --> 00:47:02,358

know an effects gold was there of course

1138

00:46:59,510 --> 00:47:05,450

he was and I yeah we sang songs with

1139

00:47:02,358 --> 00:47:08,000

George Robbie turned up later on yeah

1140

00:47:05,449 --> 00:47:09,589

well I was yeah I try to get people to

1141
00:47:08,000 --> 00:47:11,289
come down because everyone was upstairs

1142
00:47:09,590 --> 00:47:17,180
and I said no we're going to do karaoke

1143
00:47:11,289 --> 00:47:19,608
no be free to get free drinks I've sang

1144
00:47:17,179 --> 00:47:22,480
a song with that I think both Nick and

1145
00:47:19,608 --> 00:47:25,940
Tom and we sang the galaxy song

1146
00:47:22,480 --> 00:47:29,240
originally by Eric Idle really and so

1147
00:47:25,940 --> 00:47:32,090
they we sang that same couple of songs

1148
00:47:29,239 --> 00:47:34,699
and then George Robbie mr. Habib you

1149
00:47:32,090 --> 00:47:36,349
were to write turned out what the kids

1150
00:47:34,699 --> 00:47:38,659
are calling yeah she is calling her

1151
00:47:36,349 --> 00:47:42,349
Rubby Rubby I love you so he turned up

1152
00:47:38,659 --> 00:47:46,549
and stole the show of course he was just

1153
00:47:42,349 --> 00:47:49,250
like singing lights dance by David Bowie

1154
00:47:46,550 --> 00:47:51,109
he gave the course he said it was shot

1155
00:47:49,250 --> 00:47:53,690
in Sydney which it was in one of the

1156
00:47:51,108 --> 00:47:56,389
pubs in Sydney yeah and uh yeah he just

1157
00:47:53,690 --> 00:48:01,159
what was the other song that's it

1158
00:47:56,389 --> 00:48:03,618
everyone went off on that gin gin from

1159
00:48:01,159 --> 00:48:06,529
Tasmania he went absolutely nuts on that

1160
00:48:03,619 --> 00:48:07,970
song so which is which is bringing me to

1161
00:48:06,530 --> 00:48:09,980
something I wanted to discuss with you

1162
00:48:07,969 --> 00:48:12,529
and everybody here at the table one of

1163
00:48:09,980 --> 00:48:14,088
the aspects of skepticism now we do so

1164
00:48:12,530 --> 00:48:16,310
much and there is so much to know and

1165
00:48:14,088 --> 00:48:18,799
learn as you're finding out Lindley in a

1166
00:48:16,309 --> 00:48:21,199
skepticism well it's more um with the

1167
00:48:18,800 --> 00:48:25,690
homeopathy side and the medical side

1168
00:48:21,199 --> 00:48:28,848
that um I'm needing to learn about its

1169

00:48:25,690 --> 00:48:30,920
didn't grow up with science you're

1170
00:48:28,849 --> 00:48:32,450
skeptical interest really is in the in

1171
00:48:30,920 --> 00:48:34,220
the classics like they're great on the

1172
00:48:32,449 --> 00:48:35,719
paranormal in the Bigfoot some new

1173
00:48:34,219 --> 00:48:40,009
that's all the stuff that's the stuff i

1174
00:48:35,719 --> 00:48:42,319
love conspiracies UFOs Bigfoot monsters

1175
00:48:40,010 --> 00:48:45,950
monster dog is a good podcast for all

1176
00:48:42,320 --> 00:48:49,460
that joe nickell i follow with his blog

1177
00:48:45,949 --> 00:48:51,980
with this fantastic yes and it's like a

1178
00:48:49,460 --> 00:48:57,409
lot of on paranormal research like a lot

1179
00:48:51,980 --> 00:48:58,829
of things about defining your tarot

1180
00:48:57,409 --> 00:49:02,909
cards and

1181
00:48:58,829 --> 00:49:04,860
and that stupid water divining the rods

1182
00:49:02,909 --> 00:49:06,569
and well this is what we call the

1183
00:49:04,860 --> 00:49:10,140

classics no rosemary you've been

1184

00:49:06,570 --> 00:49:11,970

involved with water divining and I know

1185

00:49:10,139 --> 00:49:14,400

Steve you've been involved in urbana too

1186

00:49:11,969 --> 00:49:17,129

I mean there's so much to know and learn

1187

00:49:14,400 --> 00:49:19,050

about skepticism but what's what's your

1188

00:49:17,130 --> 00:49:21,930

opinion about keeping ourselves grounded

1189

00:49:19,050 --> 00:49:26,220

in what I guess I'd call the the

1190

00:49:21,929 --> 00:49:28,139

classics Oh necessary that's it so you

1191

00:49:26,219 --> 00:49:30,629

know you have to keep grounding the

1192

00:49:28,139 --> 00:49:33,210

classical method of skepticism in envy

1193

00:49:30,630 --> 00:49:35,430

methods of Investigation making fair

1194

00:49:33,210 --> 00:49:38,250

test being open to evidence be open to

1195

00:49:35,429 --> 00:49:42,000

claimed actually being true and we test

1196

00:49:38,250 --> 00:49:44,340

them in a property fair manner and come

1197

00:49:42,000 --> 00:49:45,869

to a good results so valid results and

1198
00:49:44,340 --> 00:49:49,320
we have to be grounded in that

1199
00:49:45,869 --> 00:49:51,059
technology in that attitude first of all

1200
00:49:49,320 --> 00:49:53,519
and then you can then apply that to

1201
00:49:51,059 --> 00:49:56,009
water divining hungry offer the UFOs

1202
00:49:53,519 --> 00:49:58,860
whatever there is you can view if you

1203
00:49:56,010 --> 00:50:02,070
establish a fair test or fair set of

1204
00:49:58,860 --> 00:50:03,570
criteria to judge the phenomenon by and

1205
00:50:02,070 --> 00:50:05,010
you can make a reasonable pronouncement

1206
00:50:03,570 --> 00:50:07,230
about it but you can't start with a

1207
00:50:05,010 --> 00:50:09,810
conclusion no because so well they can't

1208
00:50:07,230 --> 00:50:12,090
be any UFOs so no therefore you Saudi

1209
00:50:09,809 --> 00:50:13,529
must be wrong because then people will

1210
00:50:12,090 --> 00:50:14,820
be all over you they'll say well what

1211
00:50:13,530 --> 00:50:16,980
about this this this and this and we

1212
00:50:14,820 --> 00:50:19,110
were talking earlier lindley about Dish

1213
00:50:16,980 --> 00:50:20,909
galloping yes yeah how people can do

1214
00:50:19,110 --> 00:50:22,829
that they can steamroll you with endless

1215
00:50:20,909 --> 00:50:24,149
references and you've got no hope you're

1216
00:50:22,829 --> 00:50:25,349
distant and where to start you don't

1217
00:50:24,150 --> 00:50:27,269
know where Scott I'm gonna way to

1218
00:50:25,349 --> 00:50:29,909
criticize to actually come across as

1219
00:50:27,269 --> 00:50:32,969
quite as intelligent enough to fight

1220
00:50:29,909 --> 00:50:35,849
someone who has studied enough even with

1221
00:50:32,969 --> 00:50:39,480
Jenny McCarthy she has done a research

1222
00:50:35,849 --> 00:50:41,429
in what she believes in is right but to

1223
00:50:39,480 --> 00:50:44,150
actually fight her back and tell her

1224
00:50:41,429 --> 00:50:49,139
that she might be a little bit miss

1225
00:50:44,150 --> 00:50:51,720
informed my with the white in brackets

1226

00:50:49,139 --> 00:50:53,309
well I think you're discovering there is

1227
00:50:51,719 --> 00:50:57,319
a lot to learn yeah there's a lot of

1228
00:50:53,309 --> 00:51:00,539
people who do know where to start and

1229
00:50:57,320 --> 00:51:02,850
medical research is not my background so

1230
00:51:00,539 --> 00:51:04,380
on well we've all I mean we all have a

1231
00:51:02,849 --> 00:51:06,000
lot to learn all the time but I can

1232
00:51:04,380 --> 00:51:09,210
appreciate from someone from your point

1233
00:51:06,000 --> 00:51:11,039
of view really getting your feet and up

1234
00:51:09,210 --> 00:51:12,838
to your waist and up it goes into the

1235
00:51:11,039 --> 00:51:15,150
muddy waters of skepticism how

1236
00:51:12,838 --> 00:51:17,849
much there is to learn yes but I

1237
00:51:15,150 --> 00:51:21,318
particularly remember rosemary the fun

1238
00:51:17,849 --> 00:51:25,710
time we had a millimeter oh yeah Oh in

1239
00:51:21,318 --> 00:51:27,838
2002 yes there were two ministers at we

1240
00:51:25,710 --> 00:51:30,749

but this is the water divining test yes

1241
00:51:27,838 --> 00:51:32,818
and Richard made a film was the second

1242
00:51:30,748 --> 00:51:35,429
one but the thing I remember best was

1243
00:51:32,818 --> 00:51:38,759
the excuses that the diviners came up

1244
00:51:35,429 --> 00:51:42,298
with when they're divining implements

1245
00:51:38,759 --> 00:51:44,548
didn't work and there was fact that was

1246
00:51:42,298 --> 00:51:47,460
really fun yeah and this is something I

1247
00:51:44,548 --> 00:51:49,380
wanted to touch on as much as there is a

1248
00:51:47,460 --> 00:51:52,139
lot to learn and we all have a lot to

1249
00:51:49,380 --> 00:51:54,660
learn about what we talked about so we

1250
00:51:52,139 --> 00:51:57,088
know what we're talking about but I

1251
00:51:54,659 --> 00:51:59,639
really enjoy the social aspect of

1252
00:51:57,088 --> 00:52:02,759
skepticism it is fantastic when you

1253
00:51:59,639 --> 00:52:05,489
wouldn't you say so Chris no no getting

1254
00:52:02,759 --> 00:52:07,619
mighty Lindley that's not sure I I agree

1255
00:52:05,489 --> 00:52:10,409
to our town was one of my first really

1256
00:52:07,619 --> 00:52:12,630
oh sorry Tam in Vegas 2010 was my first

1257
00:52:10,409 --> 00:52:13,469
big sort of social social experience and

1258
00:52:12,630 --> 00:52:14,729
that's of course what about you guys

1259
00:52:13,469 --> 00:52:17,309
that's right yeah a whole bunch of other

1260
00:52:14,728 --> 00:52:20,098
people from from the states from the UK

1261
00:52:17,309 --> 00:52:22,440
but tam this year in sorry what were you

1262
00:52:20,099 --> 00:52:25,619
is it now last year left a monster last

1263
00:52:22,440 --> 00:52:27,059
year Tom Australia was amazing I've had

1264
00:52:25,619 --> 00:52:29,099
so many people that you know I think I

1265
00:52:27,059 --> 00:52:33,150
met every single person that that Randy

1266
00:52:29,099 --> 00:52:36,329
met so you know it's 660 people remember

1267
00:52:33,150 --> 00:52:37,920
three days yeah really really thoroughly

1268
00:52:36,329 --> 00:52:41,818
enjoyable I think we need to do more of

1269
00:52:37,920 --> 00:52:43,769
it yeah and but for a social basis of

1270
00:52:41,818 --> 00:52:45,478
friends too I mean you don't even have

1271
00:52:43,768 --> 00:52:46,978
to talk about skepticism know you meet

1272
00:52:45,478 --> 00:52:48,748
some really great people and you can go

1273
00:52:46,978 --> 00:52:50,748
and fight kites together or something

1274
00:52:48,748 --> 00:52:53,159
like that you know other interests

1275
00:52:50,748 --> 00:52:56,569
skirmish sushi Dushi we should go

1276
00:52:53,159 --> 00:52:58,579
skirmish I just go more

1277
00:52:56,570 --> 00:53:04,930
pain motor so I can self scare me

1278
00:52:58,579 --> 00:53:07,989
skeptical motorcycle yes it was no pants

1279
00:53:04,929 --> 00:53:10,190
you drive up something to be skeptical

1280
00:53:07,989 --> 00:53:20,059
then we could shoot each other and have

1281
00:53:10,190 --> 00:53:21,740
no pets that's right it's really good to

1282
00:53:20,059 --> 00:53:23,989
meet people from all walks of life of

1283

00:53:21,739 --> 00:53:26,149
all ages young and old in various jobs

1284
00:53:23,989 --> 00:53:29,269
in you know executive management right

1285
00:53:26,150 --> 00:53:32,300
down to virtually the unemployed and the

1286
00:53:29,269 --> 00:53:36,079
nobody really cares you know and if you

1287
00:53:32,300 --> 00:53:37,850
can be mixed together yeah yeah it's the

1288
00:53:36,079 --> 00:53:40,420
same we do you think having comedy to

1289
00:53:37,849 --> 00:53:42,619
respect for science massage method

1290
00:53:40,420 --> 00:53:44,329
that's really about then people quite

1291
00:53:42,619 --> 00:53:46,039
different after as artistic people and

1292
00:53:44,329 --> 00:53:48,739
so we all have different interests in

1293
00:53:46,039 --> 00:53:50,570
life but there's one really combining

1294
00:53:48,739 --> 00:53:52,219
factor but I guess that's because we're

1295
00:53:50,570 --> 00:53:53,900
all human and that's a typical trade of

1296
00:53:52,219 --> 00:53:55,939
being human isn't it looking for like

1297
00:53:53,900 --> 00:53:57,860

minded people to socialize with and I

1298

00:53:55,940 --> 00:54:00,500

mean that's why we don't hang out with

1299

00:53:57,860 --> 00:54:02,300

them homeopaths because what are we

1300

00:54:00,500 --> 00:54:05,420

going to talk about you know is

1301

00:54:02,300 --> 00:54:07,190

witnesses things that we will have a

1302

00:54:05,420 --> 00:54:10,220

Dogma say if you've hung your fan

1303

00:54:07,190 --> 00:54:13,340

especially as I captain I got a cat it's

1304

00:54:10,219 --> 00:54:17,539

around here somewhere you've got a what

1305

00:54:13,340 --> 00:54:20,960

hot dog my teddy from a bank alt ism and

1306

00:54:17,539 --> 00:54:26,000

where is it I'm not talent we were

1307

00:54:20,960 --> 00:54:28,730

moving right along it was good it is on

1308

00:54:26,000 --> 00:54:30,380

my facebook page mmm you've got a tattoo

1309

00:54:28,730 --> 00:54:31,820

on your Facebook page that's cheating

1310

00:54:30,380 --> 00:54:35,809

why does it should be on your body

1311

00:54:31,820 --> 00:54:38,080

honestly somebody's calm about over my

1312
00:54:35,809 --> 00:54:38,079
dogma

1313
00:54:39,400 --> 00:54:48,170
now do you see what what we're saying

1314
00:54:45,800 --> 00:54:49,700
here would you be of a similar mind have

1315
00:54:48,170 --> 00:54:51,530
you found lots of interesting new

1316
00:54:49,699 --> 00:54:54,079
friends and social context yeah

1317
00:54:51,530 --> 00:54:56,180
absolutely I I just enjoy talking to

1318
00:54:54,079 --> 00:54:58,130
people where you know the conversations

1319
00:54:56,179 --> 00:54:59,839
not going to dressed into you know when

1320
00:54:58,130 --> 00:55:02,720
you talk to people and they come out

1321
00:54:59,840 --> 00:55:05,750
with all sorts of world anything no I

1322
00:55:02,719 --> 00:55:07,279
just find it so much nicer to talk to

1323
00:55:05,750 --> 00:55:08,960
skeptics and at least they're informed

1324
00:55:07,280 --> 00:55:11,810
about science and all those things and

1325
00:55:08,960 --> 00:55:14,510
it's just so much easier they don't read

1326
00:55:11,809 --> 00:55:17,179
astrology well I hope they read the ones

1327
00:55:14,510 --> 00:55:19,100
that I right in the skeptic magazine oh

1328
00:55:17,179 --> 00:55:20,949
I right under the name of do a fee cap

1329
00:55:19,099 --> 00:55:24,110
which is fraud fake backwards you

1330
00:55:20,949 --> 00:55:27,409
so-called new style sign they've made up

1331
00:55:24,110 --> 00:55:30,019
that's been a galaxy for a set of stars

1332
00:55:27,409 --> 00:55:31,909
yeah the constellation forever but

1333
00:55:30,019 --> 00:55:34,909
someone tweeted that it's only just been

1334
00:55:31,909 --> 00:55:38,000
around since 1992 some astrologer on

1335
00:55:34,909 --> 00:55:40,730
Twitter and I said oh you mean some Oh

1336
00:55:38,000 --> 00:55:43,070
some sweet astrologer yes and she just

1337
00:55:40,730 --> 00:55:45,170
said I it's only been around since 1992

1338
00:55:43,070 --> 00:55:48,200
so I said I it so it's just gained its

1339
00:55:45,170 --> 00:55:53,780
magical mystical mystical powers and I

1340

00:55:48,199 --> 00:55:58,429
haven't heard back sense but uh but yes

1341
00:55:53,780 --> 00:55:59,660
um Orpheus or not Lucas this is

1342
00:55:58,429 --> 00:56:01,669
interesting because this is something

1343
00:55:59,659 --> 00:56:03,319
the skeptics have been banging on for

1344
00:56:01,670 --> 00:56:05,150
four years and years and years and years

1345
00:56:03,320 --> 00:56:07,490
and then suddenly somebody else mentions

1346
00:56:05,150 --> 00:56:10,039
it somebody and and the media pick it up

1347
00:56:07,489 --> 00:56:12,259
and they all go crazy about it the start

1348
00:56:10,039 --> 00:56:13,309
of the stars are very old I mean the

1349
00:56:12,260 --> 00:56:16,580
probably older than the earth is

1350
00:56:13,309 --> 00:56:18,500
probably older than you give me four and

1351
00:56:16,579 --> 00:56:23,929
a half for a half billion years it saw

1352
00:56:18,500 --> 00:56:26,750
as much to solving you whose twin is

1353
00:56:23,929 --> 00:56:29,419
good yeah there's the star to be there

1354
00:56:26,750 --> 00:56:31,489

since the dawn of time and the

1355

00:56:29,420 --> 00:56:33,139
consolations have been updating if not

1356

00:56:31,489 --> 00:56:35,509
named as such by a committee the

1357

00:56:33,139 --> 00:56:37,309
consolations that that means it be there

1358

00:56:35,510 --> 00:56:39,770
a little bit and we were little bit yeah

1359

00:56:37,309 --> 00:56:41,659
but they essentially there for millennia

1360

00:56:39,769 --> 00:56:43,159
yeah and offer you could have been there

1361

00:56:41,659 --> 00:56:45,230
from an alien the Sun been plowing

1362

00:56:43,159 --> 00:56:47,149
through it familiar to some astrology

1363

00:56:45,230 --> 00:56:48,170
was looking up to the sky sir oh what's

1364

00:56:47,150 --> 00:56:54,200
that

1365

00:56:48,170 --> 00:56:56,119
she does it all this again this gets

1366

00:56:54,199 --> 00:56:58,699
back to the being grounded in the

1367

00:56:56,119 --> 00:56:59,990
classic so we say astrology is one of

1368

00:56:58,699 --> 00:57:01,250
the classics of what we should be

1369
00:56:59,989 --> 00:57:03,529
grounded and we should at least have a

1370
00:57:01,250 --> 00:57:07,730
working knowledge of footbed I think

1371
00:57:03,530 --> 00:57:09,710
they're talking about I don't know

1372
00:57:07,730 --> 00:57:12,469
either but at least we at least we

1373
00:57:09,710 --> 00:57:14,289
should a year or so ago I appeared on

1374
00:57:12,469 --> 00:57:16,759
the television show with them

1375
00:57:14,289 --> 00:57:20,449
Australia's greatest astrologer Milton

1376
00:57:16,760 --> 00:57:23,990
black and people can look at that look

1377
00:57:20,449 --> 00:57:25,969
that up on youtube its Richard Saunders

1378
00:57:23,989 --> 00:57:28,519
talks about astrology i think is the

1379
00:57:25,969 --> 00:57:31,568
title and i did my little bit of

1380
00:57:28,519 --> 00:57:33,798
research on Milton black and to be

1381
00:57:31,568 --> 00:57:35,480
straightforward I just mopped the floor

1382
00:57:33,798 --> 00:57:37,309
with him you know I really did I went to

1383
00:57:35,480 --> 00:57:39,380
town on him that's because I knew what

1384
00:57:37,309 --> 00:57:41,720
he was going to say and I knew that

1385
00:57:39,380 --> 00:57:44,269
astrology has no basis so I took it from

1386
00:57:41,719 --> 00:57:46,368
there but it's it's knowing that and

1387
00:57:44,269 --> 00:57:47,690
knowing what the homeopaths are going to

1388
00:57:46,369 --> 00:57:50,329
come up with and knowing behind it

1389
00:57:47,690 --> 00:57:51,909
because the worst thing is someone

1390
00:57:50,329 --> 00:57:55,940
calling them ourselves a skeptic and

1391
00:57:51,909 --> 00:57:57,078
then utterly being lost for the argument

1392
00:57:55,940 --> 00:57:59,329
or words when they come across a

1393
00:57:57,079 --> 00:58:01,280
believer they just look wrong hmm and

1394
00:57:59,329 --> 00:58:03,170
they don't do a service at all and

1395
00:58:01,280 --> 00:58:05,420
that's the thing is just knowing how to

1396
00:58:03,170 --> 00:58:07,930
argue with someone I mean you might be

1397

00:58:05,420 --> 00:58:11,450
an armchair skeptic which I've been four

1398
00:58:07,929 --> 00:58:13,308
damn hat knows how long but I'm actually

1399
00:58:11,449 --> 00:58:17,179
knowing how to argue with someone and

1400
00:58:13,309 --> 00:58:20,180
come across as somewhat intelligent and

1401
00:58:17,179 --> 00:58:22,699
to be able to convince try to convince

1402
00:58:20,179 --> 00:58:25,669
them that they're wrong that's how about

1403
00:58:22,699 --> 00:58:27,379
oh you don't you have no idea I mean of

1404
00:58:25,670 --> 00:58:29,329
course they'd be doing the same thing

1405
00:58:27,380 --> 00:58:32,780
trying to convince us that way wrong and

1406
00:58:29,329 --> 00:58:36,109
and trying to find they're up against

1407
00:58:32,780 --> 00:58:37,339
the GRIK wallets yeah I can I can I see

1408
00:58:36,108 --> 00:58:39,500
your point of view because from their

1409
00:58:37,338 --> 00:58:42,108
point of view where the one here who are

1410
00:58:39,500 --> 00:58:45,318
closed-minded and dogmatic of course you

1411
00:58:42,108 --> 00:58:47,838

can open your mind to get in all these

1412
00:58:45,318 --> 00:58:50,529
powers and so I don't know I I wouldn't

1413
00:58:47,838 --> 00:58:52,608
mind doing that I've got a few powers

1414
00:58:50,530 --> 00:58:54,170
escaped me has to be more of a minder

1415
00:58:52,608 --> 00:58:56,509
than anybody else but you have to be

1416
00:58:54,170 --> 00:58:58,940
open to evidence if it comes along even

1417
00:58:56,510 --> 00:59:00,410
if you don't like it just hasn't

1418
00:58:58,940 --> 00:59:02,150
happened yet

1419
00:59:00,409 --> 00:59:04,460
has some people have changed their minds

1420
00:59:02,150 --> 00:59:06,920
about some things because evidence has

1421
00:59:04,460 --> 00:59:08,360
been forgive me alrighty i'm sorry

1422
00:59:06,920 --> 00:59:09,829
you're right but if i do if i think

1423
00:59:08,360 --> 00:59:11,780
about the classics it has an element

1424
00:59:09,829 --> 00:59:13,819
because i love not only you and i

1425
00:59:11,780 --> 00:59:15,980
watched a documentary last night made

1426
00:59:13,820 --> 00:59:18,410
from 1976 with Peter Graves called

1427
00:59:15,980 --> 00:59:20,329
mysterious monsters about Bigfoot about

1428
00:59:18,409 --> 00:59:22,250
a Bigfoot well there I'd be big feet

1429
00:59:20,329 --> 00:59:27,469
Bigfoot's out there but nobody's caught

1430
00:59:22,250 --> 00:59:31,400
one yet yeah so fate oh so tell me more

1431
00:59:27,469 --> 00:59:33,949
about your tattoo prohibit the feet

1432
00:59:31,400 --> 00:59:35,900
shown was so big it was like five or six

1433
00:59:33,949 --> 00:59:37,759
times the area of a human foot see have

1434
00:59:35,900 --> 00:59:38,900
to be yesterday five or six times the

1435
00:59:37,760 --> 00:59:41,330
weight of a human to leave her

1436
00:59:38,900 --> 00:59:42,559
impression that big and all sorts of

1437
00:59:41,329 --> 00:59:44,809
problems will arise about the structure

1438
00:59:42,559 --> 00:59:46,730
of a body that big that having this been

1439
00:59:44,809 --> 00:59:48,619
overs for a Bigfoot and people point out

1440
00:59:46,730 --> 00:59:50,269
in the program nobody bought a deadbeat

1441
00:59:48,619 --> 00:59:51,769
full body out you know what the funniest

1442
00:59:50,269 --> 00:59:54,079
thing of that program for me last night

1443
00:59:51,769 --> 00:59:56,360
then this car expected to tam Australia

1444
00:59:54,079 --> 00:59:58,670
is at one stage believe it or not they

1445
00:59:56,360 --> 01:00:03,010
were scientists actually disgusting

1446
00:59:58,670 --> 01:00:05,869
Bigfoot's boobs yeah I am not kidding

1447
01:00:03,010 --> 01:00:07,550
yeah remember that the Patterson film

1448
01:00:05,869 --> 01:00:09,380
right yeah and it and they're looking at

1449
01:00:07,550 --> 01:00:11,600
it saying it seems to have these big

1450
01:00:09,380 --> 01:00:12,980
breasts out in front foot boobs I really

1451
01:00:11,599 --> 01:00:15,019
fell off the chairs they say well no

1452
01:00:12,980 --> 01:00:17,210
problem yeah he's got the sort pointing

1453
01:00:15,019 --> 01:00:19,219
ahead of a male but the big boobs big

1454

01:00:17,210 --> 01:00:20,809
boobs or a female them and one of you

1455
01:00:19,219 --> 01:00:22,819
people my life's come to I'm watching a

1456
01:00:20,809 --> 01:00:24,049
documentary about Bigfoot's boobs I was

1457
01:00:22,820 --> 01:00:25,760
one of the Bigfoot believers point out

1458
01:00:24,050 --> 01:00:27,950
you know what do you know about Bigfoot

1459
01:00:25,760 --> 01:00:31,910
boobs anyway maybe they're all pointy

1460
01:00:27,949 --> 01:00:34,309
agent becomes getting a in Bigfoot

1461
01:00:31,909 --> 01:00:37,129
browse or something you know we're going

1462
01:00:34,309 --> 01:00:44,599
to start marketing Bigfoot bra I like

1463
01:00:37,130 --> 01:00:46,820
that it's the Bigfoot breast enhancer

1464
01:00:44,599 --> 01:00:50,839
I'm trying to work out what part of

1465
01:00:46,820 --> 01:00:54,769
Tamra minds Richard of boobs oh no

1466
01:00:50,840 --> 01:00:56,120
you're a manual the hashtag rebecca

1467
01:00:54,769 --> 01:00:59,869
watson i was thinking of something i

1468
01:00:56,119 --> 01:01:02,359

said uh wonder when rebecca watson did

1469

01:00:59,869 --> 01:01:04,400

her her her quiz right after me and it

1470

01:01:02,360 --> 01:01:10,269

was Twitter and everyone's a bird that

1471

01:01:04,400 --> 01:01:12,710

was hilarious everyone is it was good

1472

01:01:10,269 --> 01:01:14,239

she's lost the blood she's lost apply

1473

01:01:12,710 --> 01:01:17,960

now what a wonderful time at

1474

01:01:14,239 --> 01:01:20,269

now Chris yeah we were so pleased that

1475

01:01:17,960 --> 01:01:21,320

you were able to come along and and

1476

01:01:20,269 --> 01:01:25,210

you're just the man we're looking

1477

01:01:21,320 --> 01:01:29,300

forward to give Randy the help he needed

1478

01:01:25,210 --> 01:01:31,429

because let's face it he's 82 and he was

1479

01:01:29,300 --> 01:01:33,560

the center of attention but I thought

1480

01:01:31,429 --> 01:01:35,480

its center or Santa he used the center

1481

01:01:33,559 --> 01:01:38,360

of attention attention Eli Zealand um

1482

01:01:35,480 --> 01:01:40,849

but I thought he handled himself at his

1483
01:01:38,360 --> 01:01:43,550
age so well and he was always there for

1484
01:01:40,849 --> 01:01:45,650
people it was incredible yeah I'm then I

1485
01:01:43,550 --> 01:01:47,000
was writing sort of jotting down some

1486
01:01:45,650 --> 01:01:47,869
some notes and stuff about what we did

1487
01:01:47,000 --> 01:01:49,880
the other day I'm trying to write up a

1488
01:01:47,869 --> 01:01:52,130
bitter row prob excuse me a report about

1489
01:01:49,880 --> 01:01:53,420
it and one of the things I kept coming

1490
01:01:52,130 --> 01:01:54,920
back to was the fact that every time I

1491
01:01:53,420 --> 01:01:56,090
said to him you know maybe you maybe she

1492
01:01:54,920 --> 01:01:58,010
kind of a couple of hours rest we got a

1493
01:01:56,090 --> 01:01:59,329
lot on tonight he'd be like nope no good

1494
01:01:58,010 --> 01:02:01,550
you know I want to undo this and want to

1495
01:01:59,329 --> 01:02:04,190
undo that and I I was naked by the end I

1496
01:02:01,550 --> 01:02:07,940
think yes he's fitter than I am it's

1497
01:02:04,190 --> 01:02:11,119
just remarkable at how I am about him he

1498
01:02:07,940 --> 01:02:16,039
was just so yeah personable yeah and so

1499
01:02:11,119 --> 01:02:18,079
out there I was taken aback that it was

1500
01:02:16,039 --> 01:02:21,469
last year or the year before that he was

1501
01:02:18,079 --> 01:02:23,239
very ill no nurse and he was quite weak

1502
01:02:21,469 --> 01:02:27,289
and couldn't interact with people just

1503
01:02:23,239 --> 01:02:31,549
in case he'd catch a disease or

1504
01:02:27,289 --> 01:02:33,679
something reddit town 7 and he was in a

1505
01:02:31,550 --> 01:02:35,450
wheelchair wasn't again and then to

1506
01:02:33,679 --> 01:02:39,679
actually interact with people would have

1507
01:02:35,449 --> 01:02:42,139
been could have done something wrong you

1508
01:02:39,679 --> 01:02:44,419
know him recorded disease immunity was

1509
01:02:42,139 --> 01:02:46,519
compromised what I'm thinking of and now

1510
01:02:44,420 --> 01:02:49,480
he's just shaking everyone's hand she

1511

01:02:46,519 --> 01:02:52,280
can talk to him close and he was just

1512
01:02:49,480 --> 01:02:54,679
there and and of course there's been

1513
01:02:52,280 --> 01:02:57,350
sick just about to say it's been said

1514
01:02:54,679 --> 01:03:01,159
many times but he is as sharp as a tack

1515
01:02:57,349 --> 01:03:03,319
oh yeah just them on the ball very makes

1516
01:03:01,159 --> 01:03:04,969
time for absolutely everyone as well um

1517
01:03:03,320 --> 01:03:06,320
he would if he if you've sort of

1518
01:03:04,969 --> 01:03:07,699
suddenly get a bit knackered you he

1519
01:03:06,320 --> 01:03:09,800
would come to me and say you know Chris

1520
01:03:07,699 --> 01:03:11,329
I think we need to to head off but but

1521
01:03:09,800 --> 01:03:12,859
never before everyone was finished

1522
01:03:11,329 --> 01:03:14,059
coming to say hi and having photographs

1523
01:03:12,858 --> 01:03:16,099
and autographs and all that kind of

1524
01:03:14,059 --> 01:03:19,449
stuff it was really it was remarkable

1525
01:03:16,099 --> 01:03:21,940

like dare we say amazing I easily

1526

01:03:19,449 --> 01:03:24,129

it was amazing but yeah really really

1527

01:03:21,940 --> 01:03:28,659

glad I did it he's not spoken to be seen

1528

01:03:24,130 --> 01:03:30,640

so don't know what I did oh yeah a very

1529

01:03:28,659 --> 01:03:32,469

very cool experience but there is a

1530

01:03:30,639 --> 01:03:34,779

podcast you can download if you haven't

1531

01:03:32,469 --> 01:03:37,329

done it the amazing show with James

1532

01:03:34,780 --> 01:03:39,220

rambling and no yeah I asked him a

1533

01:03:37,329 --> 01:03:40,900

question on that about Doris Stokes and

1534

01:03:39,219 --> 01:03:44,289

online which is what the first time I

1535

01:03:40,900 --> 01:03:47,490

got into james randi back then with the

1536

01:03:44,289 --> 01:03:49,599

water tipping the when wind online

1537

01:03:47,489 --> 01:03:52,329

stormed off the show tolerate the

1538

01:03:49,599 --> 01:03:54,489

pissing off you know whatever and um

1539

01:03:52,329 --> 01:03:57,690

obviously gets played all the time on

1540
01:03:54,489 --> 01:04:00,189
Channel nine when they have their yes

1541
01:03:57,690 --> 01:04:03,639
best of television of television shows

1542
01:04:00,190 --> 01:04:06,909
and um yeah so I'm the amazing show it's

1543
01:04:03,639 --> 01:04:08,980
on iTunes and you can download it and it

1544
01:04:06,909 --> 01:04:11,619
has a question on there that I asked and

1545
01:04:08,980 --> 01:04:12,969
you can probably still actually asked

1546
01:04:11,619 --> 01:04:15,730
questions whether they'll still continue

1547
01:04:12,969 --> 01:04:17,919
the podcast but it's quite good and it

1548
01:04:15,730 --> 01:04:20,469
went for only probably 10 show that's

1549
01:04:17,920 --> 01:04:22,240
because it's great it's Randy with a lot

1550
01:04:20,469 --> 01:04:23,619
of stories but my favorite story from

1551
01:04:22,239 --> 01:04:26,109
you you were telling me just earlier

1552
01:04:23,619 --> 01:04:28,029
verse from town Australia where we met

1553
01:04:26,110 --> 01:04:31,599
by the way we we only met just recently

1554
01:04:28,030 --> 01:04:34,330
and that she was um we can't remember

1555
01:04:31,599 --> 01:04:35,980
was that the the could have been the

1556
01:04:34,329 --> 01:04:40,630
karaoke night or something but you

1557
01:04:35,980 --> 01:04:42,490
wanted to meet may not oh but but I'm

1558
01:04:40,630 --> 01:04:48,579
gonna say what I said before cuz it was

1559
01:04:42,489 --> 01:04:53,019
a square would but I I the f-word I like

1560
01:04:48,579 --> 01:04:55,449
minor I grew up with Maynard on triple j

1561
01:04:53,019 --> 01:05:00,670
and wherever the hell he was whenever he

1562
01:04:55,449 --> 01:05:04,929
was and it was Manor DS is my mindset

1563
01:05:00,670 --> 01:05:06,639
he's got the same sort of humor yeah

1564
01:05:04,929 --> 01:05:09,579
yeah and you really wanted to meet him

1565
01:05:06,639 --> 01:05:12,099
but he was engaged in conversation with

1566
01:05:09,579 --> 01:05:15,250
Brian Dunning and Dunning get out of my

1567
01:05:12,099 --> 01:05:16,779
way I want to speak to Peter I'm sorry

1568

01:05:15,250 --> 01:05:18,610
oh yeah well I said something like oh

1569
01:05:16,780 --> 01:05:20,560
sorry Brian I just want to speak to

1570
01:05:18,610 --> 01:05:23,440
Maine out it's not anything against you

1571
01:05:20,559 --> 01:05:27,969
but I've grown up with Maynard and he's

1572
01:05:23,440 --> 01:05:29,980
my hero be he can have a hero but yes

1573
01:05:27,969 --> 01:05:31,329
sir and then I ended up buying a vodka

1574
01:05:29,980 --> 01:05:33,550
and orange from a nerd

1575
01:05:31,329 --> 01:05:36,699
at the end because you know it's my

1576
01:05:33,550 --> 01:05:39,250
heart and I just absolutely love his

1577
01:05:36,699 --> 01:05:42,309
input to the skeptic zone his yeah it's

1578
01:05:39,250 --> 01:05:44,530
grace knows he's straight up and down

1579
01:05:42,309 --> 01:05:48,429
with he likes what he likes and I want

1580
01:05:44,530 --> 01:05:50,470
to hear something from someone different

1581
01:05:48,429 --> 01:05:52,659
not just the skeptical view I want to

1582
01:05:50,469 --> 01:05:54,819

hear something that's a bit out there

1583

01:05:52,659 --> 01:05:57,940

and i love the out there because it's

1584

01:05:54,820 --> 01:05:59,830

make sure what it's probably why you and

1585

01:05:57,940 --> 01:06:01,869

I got into this in the very first place

1586

01:05:59,829 --> 01:06:04,019

because we love the the out there what

1587

01:06:01,869 --> 01:06:07,739

you know that the strange the mysterious

1588

01:06:04,019 --> 01:06:13,179

911 stuff as much as we know that it's

1589

01:06:07,739 --> 01:06:15,219

bull crap I just love hearing why people

1590

01:06:13,179 --> 01:06:17,169

keep bringing it up and it might be

1591

01:06:15,219 --> 01:06:20,139

forever that they'll keep bringing up

1592

01:06:17,170 --> 01:06:21,970

the same rubbish but it's just amazing

1593

01:06:20,139 --> 01:06:25,779

that these people can continue with

1594

01:06:21,969 --> 01:06:29,019

their the way of thought 911 what's the

1595

01:06:25,780 --> 01:06:30,700

other stuff I'll conspiracies in general

1596

01:06:29,019 --> 01:06:33,009

I'm just trying to think of his name he

1597
01:06:30,699 --> 01:06:35,589
was a football I've got him on Twitter

1598
01:06:33,010 --> 01:06:38,830
and Facebook he's an English for you

1599
01:06:35,590 --> 01:06:46,570
used to be an Englishman no no no king

1600
01:06:38,829 --> 01:06:48,840
of David I of course as I said

1601
01:06:46,570 --> 01:06:52,300
on um one of the podcasts from England

1602
01:06:48,840 --> 01:06:54,730
David Icke yes David Icke king of

1603
01:06:52,300 --> 01:06:57,400
and he is king of up

1604
01:06:54,730 --> 01:06:59,380
but I love reading what he has to say no

1605
01:06:57,400 --> 01:07:03,190
will look we are so pleased at Maynard's

1606
01:06:59,380 --> 01:07:04,750
party so I appreciate the fact that may

1607
01:07:03,190 --> 01:07:06,280
not filled in for me a few weeks back

1608
01:07:04,750 --> 01:07:08,800
and you you thought that was quite funny

1609
01:07:06,280 --> 01:07:10,780
I was just great it was just relieving

1610
01:07:08,800 --> 01:07:13,930
the times when I was 15 and hearing

1611
01:07:10,780 --> 01:07:17,410
Maynard just talked his voice it's just

1612
01:07:13,929 --> 01:07:19,809
perfect for radio may not this is your

1613
01:07:17,409 --> 01:07:22,000
fan she was right here big big fan of my

1614
01:07:19,809 --> 01:07:23,920
dad and and may nights malaise and he's

1615
01:07:22,000 --> 01:07:26,860
mad show and I might actually travel up

1616
01:07:23,920 --> 01:07:29,680
to Sydney for his med show gig in Oxford

1617
01:07:26,860 --> 01:07:31,750
Street i think it is with all the widow

1618
01:07:29,679 --> 01:07:34,509
people out that way but it'll be fun

1619
01:07:31,750 --> 01:07:36,250
that's what it's all about and again I

1620
01:07:34,510 --> 01:07:37,780
suppose we've come in lots of circles

1621
01:07:36,250 --> 01:07:40,300
here but that's coming back to the

1622
01:07:37,780 --> 01:07:41,570
circle of like-minded people and having

1623
01:07:40,300 --> 01:07:44,300
a good time

1624
01:07:41,570 --> 01:07:46,100
and also being skeptics is it's almost a

1625

01:07:44,300 --> 01:07:48,710
side issue sometimes it's a stirred and

1626
01:07:46,099 --> 01:07:50,569
I think he wants to introduce music into

1627
01:07:48,710 --> 01:07:52,820
skepticism which I kind of think is

1628
01:07:50,570 --> 01:07:55,970
quite good too you got George for a bbbj

1629
01:07:52,820 --> 01:07:58,130
and George her over BTW and there's a

1630
01:07:55,969 --> 01:08:01,250
few other people into this skeptical

1631
01:07:58,130 --> 01:08:03,349
music scene but why not ask people what

1632
01:08:01,250 --> 01:08:05,659
sort of music they like in the scene and

1633
01:08:03,349 --> 01:08:08,089
hmm a lot of people are just too up and

1634
01:08:05,659 --> 01:08:13,519
down with their thoughts let's just open

1635
01:08:08,090 --> 01:08:16,460
it up and relax and just get more open

1636
01:08:13,519 --> 01:08:21,588
about skepticism whether it's in music

1637
01:08:16,460 --> 01:08:23,329
or critical thought or everything yeah

1638
01:08:21,588 --> 01:08:26,119
and that's why we're here today I think

1639
01:08:23,329 --> 01:08:27,409

universe in every night yeah we're here

1640

01:08:26,119 --> 01:08:28,849

today we're going to be quite relaxed

1641

01:08:27,409 --> 01:08:30,710

soon because the BBQ is going to be

1642

01:08:28,850 --> 01:08:32,870

starting this year's schedule at

1643

01:08:30,710 --> 01:08:34,338

barbecues but skeptical barbecue we're

1644

01:08:32,869 --> 01:08:36,108

going to crack open another bottle of

1645

01:08:34,338 --> 01:08:38,510

something rather i think is around the

1646

01:08:36,109 --> 01:08:40,160

corner the most of you believe is on the

1647

01:08:38,510 --> 01:08:42,230

spit we're gonna rehearse different

1648

01:08:40,159 --> 01:08:43,970

believes on the spit here but until then

1649

01:08:42,229 --> 01:08:45,649

and I don't want to thank everybody for

1650

01:08:43,970 --> 01:08:49,909

coming along to this lovely little

1651

01:08:45,649 --> 01:08:52,579

afternoon melbourne think tank and so

1652

01:08:49,909 --> 01:08:56,199

we'll grab our glasses here and say

1653

01:08:52,579 --> 01:08:56,199

choose to everybody from melbourne

1654
01:09:13,189 --> 01:09:18,710
hello I'm Tony Pittman the presenter of

1655
01:09:16,439 --> 01:09:21,629
the weekly radio show and podcast

1656
01:09:18,710 --> 01:09:24,088
reality check broadcast from here in

1657
01:09:21,630 --> 01:09:25,920
Melbourne Australia and if you like

1658
01:09:24,088 --> 01:09:27,960
listening to the skeptic zone maybe

1659
01:09:25,920 --> 01:09:31,319
you'd like to check out reality check

1660
01:09:27,960 --> 01:09:34,770
each week we bring you a roundup of LGBT

1661
01:09:31,319 --> 01:09:38,310
news that's news related to lesbian gay

1662
01:09:34,770 --> 01:09:42,029
bisexual and transgender issues plus a

1663
01:09:38,310 --> 01:09:44,069
movie review plus a serious skeptical

1664
01:09:42,029 --> 01:09:48,150
analysis of a topic related to

1665
01:09:44,069 --> 01:09:49,560
pseudoscience or the paranormal so if it

1666
01:09:48,149 --> 01:09:53,250
sounds like it could be right up your

1667
01:09:49,560 --> 01:09:56,940
alley visit our website at reality check

1668
01:09:53,250 --> 01:09:59,969
online dot net there you can listen

1669
01:09:56,939 --> 01:10:05,839
online download episodes or subscribe

1670
01:09:59,969 --> 01:10:05,840
that's reality check online dot net

1671
01:10:17,649 --> 01:10:22,819
thank you for downloading the skeptic

1672
01:10:20,270 --> 01:10:26,210
zonin next week i'm back in melbourne

1673
01:10:22,819 --> 01:10:29,569
once again and I visit the restoration

1674
01:10:26,210 --> 01:10:32,390
of an historic telescope very

1675
01:10:29,569 --> 01:10:33,829
interesting stuff and a special guest we

1676
01:10:32,390 --> 01:10:36,500
have a special guest star coming on the

1677
01:10:33,829 --> 01:10:38,359
show next week it's so special and so

1678
01:10:36,500 --> 01:10:41,390
secret I can't even tell you who it is I

1679
01:10:38,359 --> 01:10:43,250
better find somebody yeah look I'm gonna

1680
01:10:41,390 --> 01:10:45,530
go away and do that you enjoy the rest

1681
01:10:43,250 --> 01:10:47,479
of the week but for now this is Richard

1682

01:10:45,529 --> 01:10:52,489
Saunders signing off from Sydney

1683
01:10:47,479 --> 01:10:56,809
Australia you've been listening to the

1684
01:10:52,489 --> 01:11:00,050
skeptical zone visit our website at WWF

1685
01:10:56,810 --> 01:11:03,440
digs on TV for comments contacts and

1686
01:11:00,050 --> 01:11:07,010
extra video reports

1687
01:11:03,439 --> 01:11:07,009
the skin

1688
01:11:08,479 --> 01:11:11,169
change

1689
01:11:22,100 --> 01:11:24,160
you