

The Skeptic Zone
Show 273 - 13 Jan 2014



Dr Simon Singh

1
00:00:22,080 --> 00:00:09,100
welcome to the skeptic zone the podcast

2
00:00:28,390 --> 00:00:24,880
hello and welcome to the skeptics are an

3
00:00:31,240 --> 00:00:28,400
episode number 273 for the 13th of

4
00:00:33,580 --> 00:00:31,250
january 2014 Richard Saunders here with

5
00:00:36,880 --> 00:00:33,590
you from Sydney Australia yes I'm back

6
00:00:38,500 --> 00:00:36,890
from a wonderful trip to California

7
00:00:41,440 --> 00:00:38,510
always have a great time in California

8
00:00:43,330 --> 00:00:41,450
but it's nice to be home yeah ok it's a

9
00:00:45,580 --> 00:00:43,340
bit hot and sticky in Sydney bit sweaty

10
00:00:47,740 --> 00:00:45,590
but there you go coming up on this

11
00:00:49,920 --> 00:00:47,750
week's episode of the skeptic zone I

12
00:00:53,979 --> 00:00:49,930
catch up to a good old friend of mine

13
00:00:56,350 --> 00:00:53,989

dr. Simon Singh what a clever man my

14

00:00:58,540 --> 00:00:56,360

friends what a clever man he has written

15

00:01:01,299 --> 00:00:58,550

a new book he's written a new book oh

16

00:01:04,090 --> 00:01:01,309

hello it's Fred the cat hello Fred yep

17

00:01:06,550 --> 00:01:04,100

he has written a new book called The

18

00:01:08,590 --> 00:01:06,560

Simpsons and their mathematical secrets

19

00:01:10,090 --> 00:01:08,600

in fact Simon Singh gave a talk here in

20

00:01:12,390 --> 00:01:10,100

Sydney just the other night about his

21

00:01:15,610 --> 00:01:12,400

new book fascinating all the maths

22

00:01:17,380 --> 00:01:15,620

hidden sort of hidden in the Simpsons

23

00:01:19,149 --> 00:01:17,390

advanced mathematical problems and

24

00:01:21,219 --> 00:01:19,159

equations and all sorts of things really

25

00:01:24,819 --> 00:01:21,229

interesting stuff so I catch up with

26

00:01:27,550 --> 00:01:24,829

Simon and he also discusses the recent

27

00:01:29,740 --> 00:01:27,560

changes to the libel laws in England

28

00:01:32,109 --> 00:01:29,750

following that it's a weakened science

29

00:01:35,620 --> 00:01:32,119

back again from the Royal Institution of

30

00:01:37,029 --> 00:01:35,630

Australia with their predictions there

31

00:01:39,429 --> 00:01:37,039

are scientific predictions or their

32

00:01:43,450 --> 00:01:39,439

predictions in the world of science for

33

00:01:46,690 --> 00:01:43,460

2014 and following that Maynard's spooky

34

00:01:49,120 --> 00:01:46,700

action with his predictions or should I

35

00:01:51,219 --> 00:01:49,130

say the people who go to skeptics in the

36

00:01:54,910 --> 00:01:51,229

pub their predictions for the coming

37

00:01:58,840 --> 00:01:54,920

year 2014 what the skeptics think will

38

00:02:01,179 --> 00:01:58,850

happen this year now just a couple of

39

00:02:02,730 --> 00:02:01,189

quick notes here it's been brought to my

40

00:02:06,910 --> 00:02:02,740

attention there's a book out called

41

00:02:10,470 --> 00:02:06,920

America's imaginary hostage crisis by

42

00:02:12,940 --> 00:02:10,480

Andrew Enders be this is available on

43

00:02:16,030 --> 00:02:12,950

amazon and i will put a link in the show

44

00:02:20,050 --> 00:02:16,040

notes to this episode at www.skeptics.com

45

00:02:22,060 --> 00:02:20,060

TV now in 1979 a group of iranian

46

00:02:25,660 --> 00:02:22,070

students invaded and occupied the US

47

00:02:28,830 --> 00:02:25,670

Embassy in Tehran 6,000 miles away a

48

00:02:31,570 --> 00:02:28,840

newly trained the team of military mmm

49

00:02:34,350 --> 00:02:31,580

psychics was given the task of remotely

50

00:02:37,210 --> 00:02:34,360

viewing the embassy ground

51
00:02:40,150 --> 00:02:37,220
but how accurate were they for the first

52
00:02:43,089 --> 00:02:40,160
time ever these declassified reports are

53
00:02:44,890 --> 00:02:43,099
looked at in detail and compared to the

54
00:02:47,860 --> 00:02:44,900
real events all that does sound

55
00:02:50,500 --> 00:02:47,870
interesting America's imaginary hostage

56
00:02:56,370 --> 00:02:50,510
crisis worth a look also I'm delighted

57
00:03:00,790 --> 00:02:56,380
to say that radio citywide LPFM org

58
00:03:04,479 --> 00:03:00,800
neighbor radio 99.1 FM in Madison

59
00:03:07,330 --> 00:03:04,489
Wisconsin will now be replaying

60
00:03:10,020 --> 00:03:07,340
interviews from the skeptic zone great

61
00:03:14,800 --> 00:03:10,030
to know if you're in that area tune in

62
00:03:17,350 --> 00:03:14,810
99.1 FM well I know you're keen to hear

63
00:03:19,089 --> 00:03:17,360

Simon Singh but for now I'm going to run

64

00:03:21,699 --> 00:03:19,099

to the fridge run downstairs run to the

65

00:03:24,460 --> 00:03:21,709

fridge get myself a nice tall glass of

66

00:03:44,210 --> 00:03:24,470

ice-cold water while you enjoy the

67

00:03:49,020 --> 00:03:47,010

I'm sitting here in a sort of a

68

00:03:51,030 --> 00:03:49,030

backstreet of darling harbour in Sydney

69

00:03:52,500 --> 00:03:51,040

that other fellow some rainbow lorikeets

70

00:03:55,830 --> 00:03:52,510

in the tree above us there are some

71

00:03:57,420 --> 00:03:55,840

people walking by I'm with dr. Simon

72

00:03:58,950 --> 00:03:57,430

Singh who's visiting Australia hello

73

00:04:00,650 --> 00:03:58,960

Simon yeah we should says a very

74

00:04:03,540 --> 00:04:00,660

picturesque car park right behind this

75

00:04:05,070 --> 00:04:03,550

is a volume asst car park with hardly

76
00:04:07,920 --> 00:04:05,080
any cars but I think people can hear the

77
00:04:10,740 --> 00:04:07,930
street noises you you've found yourself

78
00:04:12,390 --> 00:04:10,750
in a rather nice part of Sydney I must

79
00:04:14,310 --> 00:04:12,400
say down here in darling harbour yeah

80
00:04:16,590 --> 00:04:14,320
well it i'm here with my wife and my

81
00:04:18,330 --> 00:04:16,600
child and we're here partly for a family

82
00:04:20,430 --> 00:04:18,340
wedding in melbourne so began heading to

83
00:04:22,110 --> 00:04:20,440
melbourne in a couple of days in a

84
00:04:26,010 --> 00:04:22,120
camper van so we had a bit of a holiday

85
00:04:28,230 --> 00:04:26,020
as well really and also chance to talk

86
00:04:29,610 --> 00:04:28,240
to some skeptics while i'm here and i've

87
00:04:30,780 --> 00:04:29,620
written a new book so i'm giving some

88
00:04:33,480 --> 00:04:30,790

talked about the book as well so it's a

89

00:04:34,710 --> 00:04:33,490

bit of work a bit of fun at a bit of

90

00:04:36,030 --> 00:04:34,720

kind of visiting relatives as well

91

00:04:37,770 --> 00:04:36,040

that's excellent well let's talk about

92

00:04:40,350 --> 00:04:37,780

the book because you were very

93

00:04:42,060 --> 00:04:40,360

graciously gave a talk here in sydney

94

00:04:44,700 --> 00:04:42,070

just a couple of nights ago the day you

95

00:04:46,860 --> 00:04:44,710

flew in I might add for our local Sydney

96

00:04:48,930 --> 00:04:46,870

skeptics in the pub all about your new

97

00:04:50,880 --> 00:04:48,940

book and the feedback we've been getting

98

00:04:52,770 --> 00:04:50,890

from the talk and the books are flying

99

00:04:54,810 --> 00:04:52,780

off the shelves so to speak at your talk

100

00:04:56,760 --> 00:04:54,820

which was very gratifying it's been very

101

00:04:59,100 --> 00:04:56,770

positive people loved your talk what's

102

00:05:01,680 --> 00:04:59,110

the book all about and and how can

103

00:05:04,140 --> 00:05:01,690

people get oh yeah but yeah yeah I guess

104

00:05:05,340 --> 00:05:04,150

he says I'd flown in that day and so

105

00:05:07,110 --> 00:05:05,350

it's normally the audience it falls

106

00:05:09,210 --> 00:05:07,120

asleep in my talks but that day was it

107

00:05:11,790 --> 00:05:09,220

was almost made it fell asleep but um

108

00:05:13,200 --> 00:05:11,800

yeah so the story of this book so the

109

00:05:14,640 --> 00:05:13,210

last book I've written was all about

110

00:05:19,890 --> 00:05:14,650

alternative medicine and that was very

111

00:05:22,890 --> 00:05:19,900

much about criticizing bad science or

112

00:05:25,230 --> 00:05:22,900

bad medicine this is a book very much

113

00:05:27,180 --> 00:05:25,240

impressive or in celebration of

114

00:05:29,370 --> 00:05:27,190

something good something positive which

115

00:05:32,180 --> 00:05:29,380

is the fact that a lot of the writers of

116

00:05:34,860 --> 00:05:32,190

The Simpsons and a lot of the writers of

117

00:05:37,950 --> 00:05:34,870

futurama because a very very similar

118

00:05:40,470 --> 00:05:37,960

team of writers those writers have very

119

00:05:42,450 --> 00:05:40,480

strong mathematical backgrounds and I

120

00:05:44,700 --> 00:05:42,460

mean people okay with degrees in maths

121

00:05:46,950 --> 00:05:44,710

which is impressive enough some have got

122

00:05:47,430 --> 00:05:46,960

PhDs in maths some of written

123

00:05:50,210 --> 00:05:47,440

mathematically

124

00:05:53,220 --> 00:05:50,220

research papers one chap Jeff Westbrook

125

00:05:56,760 --> 00:05:53,230

was a Yale professor before he became a

126

00:05:58,680 --> 00:05:56,770

comedy writer and all of these writers

127

00:06:00,930 --> 00:05:58,690

when the mathematical background have

128

00:06:03,870 --> 00:06:00,940

been smuggling mathematical equations

129

00:06:07,020 --> 00:06:03,880

and special mathematical numbers into

130

00:06:09,420 --> 00:06:07,030

the simpsons and futurama over over the

131

00:06:11,520 --> 00:06:09,430

last few decades or 25 years in the case

132

00:06:13,530 --> 00:06:11,530

of the simpsons and and people have

133

00:06:16,230 --> 00:06:13,540

never noticed them before very very few

134

00:06:18,330 --> 00:06:16,240

people noticing because they smuggled

135

00:06:21,390 --> 00:06:18,340

into the name of a book on a bookshelf

136

00:06:23,850 --> 00:06:21,400

or or the name of a shop is homer and

137

00:06:25,770 --> 00:06:23,860

bart walk by and and so the book is

138

00:06:27,830 --> 00:06:25,780

about really pulling out all those bits

139

00:06:30,060 --> 00:06:27,840

of maths explaining what the math is

140

00:06:31,650 --> 00:06:30,070

explaining a bit about it in the context

141

00:06:34,140 --> 00:06:31,660

of the show and what the shows all about

142

00:06:35,970 --> 00:06:34,150

and talking about the writers who are

143

00:06:38,790 --> 00:06:35,980

these people who started off as

144

00:06:41,070 --> 00:06:38,800

mathematicians and who are now not just

145

00:06:43,800 --> 00:06:41,080

comedy writers but comedy writers on the

146

00:06:45,510 --> 00:06:43,810

most successful TV show in history yes

147

00:06:48,720 --> 00:06:45,520

yes that's right and it was personating

148

00:06:52,260 --> 00:06:48,730

when you had example stills from the

149

00:06:55,230 --> 00:06:52,270

show and you do min on a corner of the

150

00:06:57,300 --> 00:06:55,240

whole frame and there's a number yeah

151
00:06:59,100 --> 00:06:57,310
which had a very special meaning or a

152
00:07:01,740 --> 00:06:59,110
series of numbers yeah I mean so for

153
00:07:04,740 --> 00:07:01,750
example this episode called Marge and

154
00:07:07,170 --> 00:07:04,750
Homer turn a couple play where a

155
00:07:08,520 --> 00:07:07,180
character called Tabitha vicks whose

156
00:07:10,920 --> 00:07:08,530
marriage with baseball player but

157
00:07:13,650 --> 00:07:10,930
Mitchell Tabitha and Parker having

158
00:07:15,600 --> 00:07:13,660
marital problems and the whole episode

159
00:07:18,630 --> 00:07:15,610
is about how their marriage is repaired

160
00:07:20,520 --> 00:07:18,640
by Marge and Homer so that's what the

161
00:07:24,740 --> 00:07:20,530
stories are bagged and at the end of the

162
00:07:27,840 --> 00:07:24,750
story there's a jumbo vision TV screen

163
00:07:30,409 --> 00:07:27,850

at the baseball stadium and there's a

164

00:07:35,280 --> 00:07:30,419

question on it which says what is the

165

00:07:37,440 --> 00:07:35,290

crowd in today's baseball game and there

166

00:07:40,020 --> 00:07:37,450

are three numbers up there and each of

167

00:07:41,880 --> 00:07:40,030

those numbers is mathematically very

168

00:07:43,380 --> 00:07:41,890

very significant and but they're not

169

00:07:45,360 --> 00:07:43,390

dissimilar they're all in the same room

170

00:07:47,400 --> 00:07:45,370

they're all about 8,000 which is what

171

00:07:51,150 --> 00:07:47,410

you might expect for a baseball crowd so

172

00:07:53,340 --> 00:07:51,160

I think one number is 81 to 88 12 a l

173

00:07:54,960 --> 00:07:53,350

think is a perfect number which means

174

00:07:58,080 --> 00:07:54,970

that the factors of the number the

175

00:08:00,600 --> 00:07:58,090

divisors of that number add up to the

176

00:08:01,320 --> 00:08:00,610

number itself like six one two and three

177

00:08:03,050 --> 00:08:01,330

go in to see

178

00:08:08,369 --> 00:08:03,060

and one and two and three add up to six

179

00:08:10,589 --> 00:08:08,379

another number is 8 2008 yeah 8208 and

180

00:08:13,260 --> 00:08:10,599

an 8 2008 is special because it's got

181

00:08:15,869 --> 00:08:13,270

four digits so we raise each digit to

182

00:08:18,209 --> 00:08:15,879

the 4th power so 8208 becomes 8 to the

183

00:08:20,490 --> 00:08:18,219

fourth plus 2 to the fourth plus zero to

184

00:08:23,040 --> 00:08:20,500

the fourth plus 8 to the four add all of

185

00:08:25,679 --> 00:08:23,050

that together and you get back to 8208

186

00:08:27,390 --> 00:08:25,689

you call that a NASA sick sister yet a

187

00:08:30,420 --> 00:08:27,400

narcissistic number because the digits

188

00:08:32,130 --> 00:08:30,430

number the number reforms itself from

189

00:08:35,100 --> 00:08:32,140

its own digits it's an almost in love

190

00:08:36,420 --> 00:08:35,110

with itself as a narcissistic number and

191

00:08:38,219 --> 00:08:36,430

again these numbers are rare there are

192

00:08:41,250 --> 00:08:38,229

less than a hundred I'm actually

193

00:08:43,500 --> 00:08:41,260

infinity of numbers so roof those are

194

00:08:47,850 --> 00:08:43,510

the kind of things that are going on in

195

00:08:49,740 --> 00:08:47,860

the show what did you have to do to to

196

00:08:52,259 --> 00:08:49,750

discover all these little gems well I

197

00:08:54,120 --> 00:08:52,269

mean did you literally spend hours upon

198

00:08:56,639 --> 00:08:54,130

hours watching the simpsons and we

199

00:08:58,860 --> 00:08:56,649

jarama yeah I thinking about it's a book

200

00:09:02,460 --> 00:08:58,870

I've been researching all my life or for

201
00:09:06,000 --> 00:09:02,470
half of my life anyway but so I spotted

202
00:09:07,290 --> 00:09:06,010
this about 10 years ago and and I wanted

203
00:09:09,210 --> 00:09:07,300
to write a book about it 10 years ago

204
00:09:11,069 --> 00:09:09,220
and then I got distracted by alternative

205
00:09:14,340 --> 00:09:11,079
medicine you know I got sued for libel

206
00:09:15,990 --> 00:09:14,350
they took up a few years and we've been

207
00:09:17,790 --> 00:09:16,000
campaigning for libel reform that took

208
00:09:20,220 --> 00:09:17,800
up some time but then about two years

209
00:09:23,759 --> 00:09:20,230
ago or three years ago I got back to the

210
00:09:26,490 --> 00:09:23,769
book and partly I rewatched a lot of

211
00:09:28,199 --> 00:09:26,500
episodes with the fries for it with your

212
00:09:31,340 --> 00:09:28,209
pause button yeah and just just just

213
00:09:33,509 --> 00:09:31,350

watching through them over and over I

214

00:09:35,189 --> 00:09:33,519

listened a lot of the shows i listened

215

00:09:37,560 --> 00:09:35,199

to them with the DVD commentary switched

216

00:09:39,689 --> 00:09:37,570

on because then the right is sometimes

217

00:09:41,460 --> 00:09:39,699

mentioned oh by the way this is why this

218

00:09:43,530 --> 00:09:41,470

numbers there right well if you look in

219

00:09:47,069 --> 00:09:43,540

the corner you'll see sir miles last

220

00:09:48,360 --> 00:09:47,079

theorem or something yeah partly I spoke

221

00:09:51,569 --> 00:09:48,370

to other people for example there are

222

00:09:54,660 --> 00:09:51,579

two professors in America who've written

223

00:09:57,689 --> 00:09:54,670

lecture courses for undergraduates using

224

00:09:59,569 --> 00:09:57,699

a few examples from The Simpsons so they

225

00:10:02,250 --> 00:09:59,579

were very helpful i interviewed them and

226

00:10:04,050 --> 00:10:02,260

then I went to America and I spend a

227

00:10:05,759 --> 00:10:04,060

week with the writers that must have

228

00:10:08,269 --> 00:10:05,769

been really amazing I was fantastic they

229

00:10:11,939 --> 00:10:08,279

were so generous with their time so

230

00:10:13,910 --> 00:10:11,949

willing to I mean the book is called The

231

00:10:17,420 --> 00:10:13,920

Simpsons and their mathematical seek

232

00:10:22,040 --> 00:10:17,430

right but but in truth it was never a

233

00:10:24,079 --> 00:10:22,050

secret the writers hit the maths but

234

00:10:25,940 --> 00:10:24,089

they hit it purely so that it didn't get

235

00:10:27,170 --> 00:10:25,950

in the way of the plot sort of hidden in

236

00:10:30,500 --> 00:10:27,180

plain sight hidden in plain sight

237

00:10:33,710 --> 00:10:30,510

exactly and so it was never supposed to

238

00:10:36,050 --> 00:10:33,720

be a secret and they're very happy that

239

00:10:37,610 --> 00:10:36,060

now more people know about this this

240

00:10:39,319 --> 00:10:37,620

mathematics because in a way what

241

00:10:42,079 --> 00:10:39,329

they're doing is that they're reaching

242

00:10:43,639 --> 00:10:42,089

out to their fellow geeks you know if

243

00:10:46,660 --> 00:10:43,649

you're a teenage kid and you love maths

244

00:10:48,680 --> 00:10:46,670

and you see some math in the Simpsons

245

00:10:50,180 --> 00:10:48,690

you begin to think what hang on the

246

00:10:52,610 --> 00:10:50,190

right and the simpsons love maths as

247

00:10:54,650 --> 00:10:52,620

much as i do and and maybe that makes

248

00:10:58,189 --> 00:10:54,660

people feel better about their own love

249

00:11:01,519 --> 00:10:58,199

of mathematics oh yeah no no secret but

250

00:11:03,170 --> 00:11:01,529

but but something that people have not

251
00:11:05,210 --> 00:11:03,180
really known about before and I like the

252
00:11:07,879 --> 00:11:05,220
fact that the Booker's Simpsons yellow

253
00:11:10,000 --> 00:11:07,889
in color it is yellow I never noticed

254
00:11:14,600 --> 00:11:10,010
that before you're right you're right oh

255
00:11:16,819 --> 00:11:14,610
but yeah I mean Fox obviously own the

256
00:11:18,829 --> 00:11:16,829
simpsons and labor they were very very

257
00:11:20,269 --> 00:11:18,839
supportive they gave us okay some stills

258
00:11:22,280 --> 00:11:20,279
that i was wondering how that worked

259
00:11:25,189 --> 00:11:22,290
with the fact that you're using their

260
00:11:28,269 --> 00:11:25,199
materials well there's others named the

261
00:11:30,560 --> 00:11:28,279
sims well yeah i think if you're kritis

262
00:11:32,870 --> 00:11:30,570
criticizing not quite the right word but

263
00:11:34,720 --> 00:11:32,880

if you're commenting on it on a work of

264

00:11:37,250 --> 00:11:34,730

art which i think the simpsons is ya

265

00:11:39,079 --> 00:11:37,260

then then you'll give it quite a lot of

266

00:11:40,699 --> 00:11:39,089

flexibility if you're great basically

267

00:11:42,769 --> 00:11:40,709

creating your own content and you're

268

00:11:44,300 --> 00:11:42,779

commenting on it okay and you're

269

00:11:46,579 --> 00:11:44,310

praising it at the end and it is a

270

00:11:47,930 --> 00:11:46,589

celebration of the show and it's written

271

00:11:50,420 --> 00:11:47,940

i think you know really with the

272

00:11:53,240 --> 00:11:50,430

collaboration of the writers and and as

273

00:11:54,980 --> 00:11:53,250

if Fox gave us four images to use from

274

00:11:56,900 --> 00:11:54,990

the show in the book which is great

275

00:11:59,449 --> 00:11:56,910

because they're very very careful about

276

00:12:02,420 --> 00:11:59,459

how their images are used and the

277

00:12:03,769 --> 00:12:02,430

writers have just you know even after

278

00:12:06,170 --> 00:12:03,779

the book was published they've been

279

00:12:07,850 --> 00:12:06,180

giving interviews I gave a lecture at

280

00:12:10,160 --> 00:12:07,860

the Museum of mathematics in New York

281

00:12:14,120 --> 00:12:10,170

with my crease all about his involvement

282

00:12:15,680 --> 00:12:14,130

in the show and and so on so yeah it's

283

00:12:20,210 --> 00:12:15,690

been really good working with the

284

00:12:21,410 --> 00:12:20,220

writers and and yeah it's a cell and say

285

00:12:23,600 --> 00:12:21,420

not just the symptoms but also a

286

00:12:25,130 --> 00:12:23,610

futurama right when i when i got to the

287

00:12:27,680 --> 00:12:25,140

states they were actually editing the

288

00:12:29,600 --> 00:12:27,690

next series and the final series a few

289

00:12:33,410 --> 00:12:29,610

drama so I got to see some of the shows

290

00:12:35,180 --> 00:12:33,420

before they were all cast and those 2d

291

00:12:37,370 --> 00:12:35,190

blacktop is an episode that people may

292

00:12:41,150 --> 00:12:37,380

have seen but in this episode that

293

00:12:43,760 --> 00:12:41,160

there's a drag racing scene on a mobius

294

00:12:46,670 --> 00:12:43,770

strip drag strip when a mobius strip is

295

00:12:48,320 --> 00:12:46,680

an old mathematical geometrical loop

296

00:12:49,730 --> 00:12:48,330

with a twist in it boosted it which

297

00:12:53,200 --> 00:12:49,740

means it is a shape that only has one

298

00:12:55,430 --> 00:12:53,210

side yeah and because of that in the end

299

00:12:58,250 --> 00:12:55,440

Leela professor farnsworth have a

300

00:13:00,380 --> 00:12:58,260

head-on collision and they get squashed

301
00:13:02,090 --> 00:13:00,390
into two dimensions I've seen that

302
00:13:04,700 --> 00:13:02,100
episode little earlier so that the whole

303
00:13:08,030 --> 00:13:04,710
animation changes and that is an homage

304
00:13:10,430 --> 00:13:08,040
to a novella written by Edwin a Abbott

305
00:13:11,840 --> 00:13:10,440
called flatland which is all about

306
00:13:15,470 --> 00:13:11,850
creatures living in a two-dimensional

307
00:13:18,650 --> 00:13:15,480
world so you have a TV show now paying

308
00:13:20,540 --> 00:13:18,660
or Marge to a mathematical novella and

309
00:13:24,110 --> 00:13:20,550
then eventually when they figure out how

310
00:13:25,790 --> 00:13:24,120
to get back to three dimensions you know

311
00:13:28,460 --> 00:13:25,800
for good good to go from two dimensions

312
00:13:30,890 --> 00:13:28,470
to three dimensions you don't just snap

313
00:13:35,360 --> 00:13:30,900

between two and three you could pass

314

00:13:36,380 --> 00:13:35,370

between the fractional dimensions now

315

00:13:37,430 --> 00:13:36,390

you might think we're hang or how can

316

00:13:40,700 --> 00:13:37,440

have some how can something have a

317

00:13:43,310 --> 00:13:40,710

fractional dimension well fractals turn

318

00:13:46,310 --> 00:13:43,320

out to have a fractional dimension and

319

00:13:47,660 --> 00:13:46,320

and so as they pass as the characters

320

00:13:50,360 --> 00:13:47,670

move from two dimensions to three

321

00:13:52,970 --> 00:13:50,370

dimensions they pass through fractal

322

00:13:56,180 --> 00:13:52,980

landscapes so again all of this is is

323

00:13:58,250 --> 00:13:56,190

kind of just background yeah yeah but if

324

00:14:01,190 --> 00:13:58,260

you know about these things it just

325

00:14:03,200 --> 00:14:01,200

makes a show even even richer and

326

00:14:04,520 --> 00:14:03,210

something fell over there I don't know

327

00:14:07,130 --> 00:14:04,530

what it was but if you don't know about

328

00:14:08,900 --> 00:14:07,140

that stuff it's still a funny show yes

329

00:14:10,730 --> 00:14:08,910

yes actually enjoy the adventure that's

330

00:14:12,590 --> 00:14:10,740

that that's the skill of these writings

331

00:14:16,310 --> 00:14:12,600

that it's working on so many different

332

00:14:19,030 --> 00:14:16,320

levels that yeah yeah

333

00:14:21,860 --> 00:14:19,040

yeah I remember when I came back from

334

00:14:23,600 --> 00:14:21,870

when the Simpson started I was working

335

00:14:26,870 --> 00:14:23,610

in CERN at the time I missed I think the

336

00:14:28,370 --> 00:14:26,880

first two seasons I came back in my 9

337

00:14:30,710 --> 00:14:28,380

year old nephew was watching this old

338

00:14:33,500 --> 00:14:30,720

show with yellow characters and so on

339

00:14:36,350 --> 00:14:33,510

and it I didn't really get and I assumed

340

00:14:38,120 --> 00:14:36,360

it was a show for 9 year olds and it's

341

00:14:39,710 --> 00:14:38,130

got lots of slapstick lots of fun and

342

00:14:41,720 --> 00:14:39,720

games and then you begin to watch it as

343

00:14:43,370 --> 00:14:41,730

an adult and pretty soon you realize

344

00:14:46,250 --> 00:14:43,380

that this is a show that works for

345

00:14:47,690 --> 00:14:46,260

everybody yes oh absolutely well he's

346

00:14:49,970 --> 00:14:47,700

been many shows like that over the years

347

00:14:52,280 --> 00:14:49,980

of gas as with you know how can people

348

00:14:54,080 --> 00:14:52,290

get their hands on their own copy okay i

349

00:14:56,780 --> 00:14:54,090

guess i guess i get it's available in

350

00:14:58,430 --> 00:14:56,790

all good bookshops i think they're going

351

00:15:01,220 --> 00:14:58,440

the motorbikes running just dashed off

352

00:15:04,400 --> 00:15:01,230

to get a copy right now but yeah I guess

353

00:15:06,650 --> 00:15:04,410

it's available online I guess so yeah

354

00:15:08,300 --> 00:15:06,660

I've just I've just arrived here and so

355

00:15:10,100 --> 00:15:08,310

I'm going to be doing some more

356

00:15:16,760 --> 00:15:10,110

interviews with various radio stations

357

00:15:19,340 --> 00:15:16,770

and a bit of TV so so yeah but I google

358

00:15:21,380 --> 00:15:19,350

yeah being google it I mean the response

359

00:15:23,060 --> 00:15:21,390

has been fantastic in Germany it's a

360

00:15:25,400 --> 00:15:23,070

it's a runaway bestseller you know I

361

00:15:28,160 --> 00:15:25,410

gave a talk in Berlin and I was thrilled

362

00:15:30,590 --> 00:15:28,170

to bits because in the audience was the

363

00:15:32,840 --> 00:15:30,600

German actor a german actress actor he

364

00:15:35,060 --> 00:15:32,850

plays Lisa no does the voiceover for

365

00:15:37,220 --> 00:15:35,070

Lisa and I was chatting to her

366

00:15:41,090 --> 00:15:37,230

afterwards and she had no idea of all

367

00:15:42,470 --> 00:15:41,100

the mathematica show really so so that's

368

00:15:44,180 --> 00:15:42,480

been great to take you off in Germany

369

00:15:47,450 --> 00:15:44,190

the response in Britain's been great and

370

00:15:49,730 --> 00:15:47,460

not in America I was touring and so it's

371

00:15:51,770 --> 00:15:49,740

it's just you know you've spent years

372

00:15:53,360 --> 00:15:51,780

working on a book and what you want this

373

00:15:55,220 --> 00:15:53,370

for people to go out there and enjoy it

374

00:15:56,570 --> 00:15:55,230

so well so far it's been great I think

375

00:15:58,900 --> 00:15:56,580

the reaction from the crowd the other

376

00:16:01,400 --> 00:15:58,910

night in the pub was interesting i was

377

00:16:03,680 --> 00:16:01,410

up the front and those well i was moving

378

00:16:05,540 --> 00:16:03,690

around a bit but what I really loved was

379

00:16:08,360 --> 00:16:05,550

you would show something and there would

380

00:16:11,690 --> 00:16:08,370

be gasps yeah people would really truly

381

00:16:13,250 --> 00:16:11,700

go oh like they've seen the most amazing

382

00:16:13,940 --> 00:16:13,260

because they probably know the episode

383

00:16:16,580 --> 00:16:13,950

of their never real

384

00:16:17,990 --> 00:16:16,590

the thing yet I think I think people

385

00:16:20,150 --> 00:16:18,000

sometimes think well if this is a book

386

00:16:22,790 --> 00:16:20,160

about the simpsons the maths in it must

387

00:16:25,130 --> 00:16:22,800

be fairly trivial and the maths is

388

00:16:27,710 --> 00:16:25,140

nothing but it nothing it's a deal

389

00:16:29,360 --> 00:16:27,720

nothing open it there are discussions of

390

00:16:31,250 --> 00:16:29,370

infinity but not only discussions the

391

00:16:33,890 --> 00:16:31,260

infinity and future armor the cinema is

392

00:16:36,770 --> 00:16:33,900

called the LF null and a left null is

393

00:16:38,810 --> 00:16:36,780

the smallest type of infinity so the

394

00:16:40,160 --> 00:16:38,820

implication and it's a very important

395

00:16:42,890 --> 00:16:40,170

mathematical implication is it there are

396

00:16:44,740 --> 00:16:42,900

different scales of infinity so we talk

397

00:16:47,450 --> 00:16:44,750

about everything from calculus and

398

00:16:50,030 --> 00:16:47,460

infinite decimals all the way up to

399

00:16:51,740 --> 00:16:50,040

infinity and everything in between and

400

00:16:53,120 --> 00:16:51,750

then I think the lovely thing is it

401
00:16:55,790 --> 00:16:53,130
although some of the ideas are quite

402
00:16:57,860 --> 00:16:55,800
complicated you've got Marge and Homer

403
00:17:00,290 --> 00:16:57,870
kind of holding your hand and taking you

404
00:17:01,940 --> 00:17:00,300
through the but hopefully hopefully kind

405
00:17:03,140 --> 00:17:01,950
of making it more accessible found out

406
00:17:05,030 --> 00:17:03,150
where I can certainly recommend that

407
00:17:07,910 --> 00:17:05,040
book and if you have a chance to see dr.

408
00:17:09,920 --> 00:17:07,920
Simon Singh present don't miss that

409
00:17:14,630 --> 00:17:09,930
chance now let's talk briefly about the

410
00:17:17,240 --> 00:17:14,640
latest developments in the UK when it

411
00:17:19,850 --> 00:17:17,250
comes to the libel situation and also

412
00:17:22,040 --> 00:17:19,860
the chiropractic all mixed up yes so

413
00:17:24,829 --> 00:17:22,050

okay so I was sued for libel Bonnie hire

414

00:17:29,180 --> 00:17:24,839

practice in Britain and eventually won

415

00:17:32,210 --> 00:17:29,190

my case but two things came out of that

416

00:17:34,430 --> 00:17:32,220

two good things came out of it one is

417

00:17:36,920 --> 00:17:34,440

that there was more awareness of the

418

00:17:38,810 --> 00:17:36,930

rotten claims made by some chiropractors

419

00:17:41,270 --> 00:17:38,820

in terms of lack of evidence to support

420

00:17:42,860 --> 00:17:41,280

these claims and so I think people in

421

00:17:45,380 --> 00:17:42,870

general are more aware that

422

00:17:50,690 --> 00:17:45,390

chiropractors can't treat asthma really

423

00:17:53,840 --> 00:17:50,700

young and also there were there were

424

00:17:55,490 --> 00:17:53,850

skeptics two or three in particular who

425

00:17:57,830 --> 00:17:55,500

began to submit complaints to the

426

00:17:59,630 --> 00:17:57,840

regulatory body of chiropractors so I

427

00:18:01,360 --> 00:17:59,640

think the regulator's of chiropractic

428

00:18:04,150 --> 00:18:01,370

have come down on some of these claims

429

00:18:06,350 --> 00:18:04,160

and so so in Britain I think

430

00:18:08,360 --> 00:18:06,360

chiropractic is better understood in

431

00:18:11,270 --> 00:18:08,370

terms of limitations and is better

432

00:18:12,740 --> 00:18:11,280

policed by its regulators and the other

433

00:18:14,960 --> 00:18:12,750

good thing that came out of it was that

434

00:18:17,990 --> 00:18:14,970

lots of people said that they were being

435

00:18:20,930 --> 00:18:18,000

sued for libel and that and people began

436

00:18:23,060 --> 00:18:20,940

to realize how one-sided our libel laws

437

00:18:24,260 --> 00:18:23,070

in England were in fact the last not

438

00:18:25,820 --> 00:18:24,270

then maybe not the last time I was here

439

00:18:26,970 --> 00:18:25,830

but the time before that I gave an

440

00:18:29,700 --> 00:18:26,980

interview to the Melbourne

441

00:18:31,980 --> 00:18:29,710

yeah and my interview could not be

442

00:18:34,409 --> 00:18:31,990

published because the journalist was

443

00:18:36,840 --> 00:18:34,419

scared that he might end up getting sued

444

00:18:38,490 --> 00:18:36,850

back in London yeah that's bizarre yeah

445

00:18:40,530 --> 00:18:38,500

it's a thing called libel Torres I have

446

00:18:42,450 --> 00:18:40,540

heard of that yeah the libel laws in

447

00:18:43,860 --> 00:18:42,460

England being so one-sided that people

448

00:18:46,080 --> 00:18:43,870

from all over the world was suing in

449

00:18:49,230 --> 00:18:46,090

London yeah so a campaign started to

450

00:18:51,990 --> 00:18:49,240

reform English libel law it took years

451
00:18:53,700 --> 00:18:52,000
and years which is actually three years

452
00:18:55,830 --> 00:18:53,710
but but that's pretty quick in terms of

453
00:19:00,030 --> 00:18:55,840
transforming a whole area of law from

454
00:19:03,000 --> 00:19:00,040
scratch but the 2013 defamation act

455
00:19:06,150 --> 00:19:03,010
which was passed last year came into

456
00:19:09,299 --> 00:19:06,160
force earlier this month and so we now

457
00:19:10,860 --> 00:19:09,309
have a new defamation law you know we

458
00:19:12,750 --> 00:19:10,870
need a defamation law you know we don't

459
00:19:14,340 --> 00:19:12,760
want to get rid of libel you know we've

460
00:19:16,830 --> 00:19:14,350
all got reputations and we wouldn't want

461
00:19:18,510 --> 00:19:16,840
them unfairly besmirched yeah but at the

462
00:19:19,890 --> 00:19:18,520
same time we want to encourage free

463
00:19:23,940 --> 00:19:19,900

speech and it's about getting that

464

00:19:26,190 --> 00:19:23,950

balance right and the new libel law is a

465

00:19:28,440 --> 00:19:26,200

big step towards having a fairer balance

466

00:19:30,090 --> 00:19:28,450

so there are many many changes so for

467

00:19:32,880 --> 00:19:30,100

example it's now harder to bring libel

468

00:19:35,730 --> 00:19:32,890

tourism cases to London from a

469

00:19:38,490 --> 00:19:35,740

scientific point of view if you publish

470

00:19:40,289 --> 00:19:38,500

research in an academic journal and it's

471

00:19:43,200 --> 00:19:40,299

been peer-reviewed it's going to be

472

00:19:44,820 --> 00:19:43,210

really hard to get sued for libel so in

473

00:19:47,549 --> 00:19:44,830

a way that's the place where open

474

00:19:49,770 --> 00:19:47,559

discussion needs to be as sacred as

475

00:19:51,539 --> 00:19:49,780

possible and the new libel will reflect

476

00:19:53,370 --> 00:19:51,549

that and there are many other changes in

477

00:19:55,740 --> 00:19:53,380

the libel or which are generally very

478

00:19:58,950 --> 00:19:55,750

positive and more to come do you think

479

00:20:00,720 --> 00:19:58,960

oh well there are two things that I

480

00:20:03,330 --> 00:20:00,730

think we'll have to keep an eye on one

481

00:20:05,760 --> 00:20:03,340

is that how are the judge is going to

482

00:20:07,980 --> 00:20:05,770

interpret this law and I think there are

483

00:20:10,940 --> 00:20:07,990

signs already that judges are

484

00:20:13,289 --> 00:20:10,950

interpreting the old law in a more

485

00:20:15,539 --> 00:20:13,299

generous fashion so I think they'll

486

00:20:16,890 --> 00:20:15,549

understand what the new law is supposed

487

00:20:19,950 --> 00:20:16,900

to do and will interpret it in the

488

00:20:23,779 --> 00:20:19,960

appropriate manner the problem that

489

00:20:26,330 --> 00:20:23,789

still has to be fixed is that

490

00:20:29,149 --> 00:20:26,340

Northern Ireland hasn't adopted this new

491

00:20:31,149 --> 00:20:29,159

libel law really and in a way that's

492

00:20:34,279 --> 00:20:31,159

that's fine because they have their own

493

00:20:36,469 --> 00:20:34,289

political process and they need to make

494

00:20:38,419 --> 00:20:36,479

sure that they're happy with it my

495

00:20:40,399 --> 00:20:38,429

problem and many other people share this

496

00:20:44,930 --> 00:20:40,409

concern is that they don't seem to show

497

00:20:47,299 --> 00:20:44,940

great enthusiasm for changing or keen to

498

00:20:49,039 --> 00:20:47,309

do it with any any speed at all and and

499

00:20:51,560 --> 00:20:49,049

if Northern Ireland doesn't change its

500

00:20:54,739 --> 00:20:51,570

libel law then Belfast will become the

501
00:20:58,820 --> 00:20:54,749
new liable capital and academic journals

502
00:21:01,249 --> 00:20:58,830
will end up being sued in Belfast so you

503
00:21:03,769 --> 00:21:01,259
know I I hope it doesn't take an

504
00:21:07,099 --> 00:21:03,779
outrageous and embarrassing case to

505
00:21:08,690 --> 00:21:07,109
encourage Belfast to change and I hope

506
00:21:11,629 --> 00:21:08,700
that they change sooner rather than

507
00:21:13,430 --> 00:21:11,639
later well it's been certainly taken up

508
00:21:16,039 --> 00:21:13,440
a lot of your time over last yeah and

509
00:21:17,180 --> 00:21:16,049
just you know I said it the other night

510
00:21:19,009 --> 00:21:17,190
when i was here in sydney and it's

511
00:21:21,950 --> 00:21:19,019
absolutely true that the support we

512
00:21:24,049 --> 00:21:21,960
received in the UK from skeptics around

513
00:21:26,210 --> 00:21:24,059

the world and skeptics here in australia

514

00:21:28,869 --> 00:21:26,220

and cosmos magazine i remember ran a a

515

00:21:31,580 --> 00:21:28,879

great article supporting the campaign

516

00:21:34,249 --> 00:21:31,590

that was really much appreciated for a

517

00:21:36,979 --> 00:21:34,259

personal point of view when when my back

518

00:21:39,289 --> 00:21:36,989

was against the ropes and it looked like

519

00:21:40,369 --> 00:21:39,299

i was going to lose my case knowing that

520

00:21:43,999 --> 00:21:40,379

there were people around the world

521

00:21:46,729 --> 00:21:44,009

tweeting blogging podcast inka was a

522

00:21:49,430 --> 00:21:46,739

great morale booster for me i think i

523

00:21:51,619 --> 00:21:49,440

even gave you a quick call the day after

524

00:21:52,790 --> 00:21:51,629

the Queen announced in Parliament that

525

00:21:55,520 --> 00:21:52,800

these laws were on

526
00:21:57,440 --> 00:21:55,530
you remember that I look even they were

527
00:21:58,430 --> 00:21:57,450
not mean open Parliament yes yes yes

528
00:22:00,350 --> 00:21:58,440
you're absolutely right you're

529
00:22:03,890 --> 00:22:00,360
absolutely right there with the key

530
00:22:05,600 --> 00:22:03,900
moments in this in the case that yeah

531
00:22:08,500 --> 00:22:05,610
we'll stay in my mind and there was that

532
00:22:11,540 --> 00:22:08,510
occasion I remember when I got sooo

533
00:22:13,130 --> 00:22:11,550
James Randi and Phil Plait emailed me

534
00:22:14,870 --> 00:22:13,140
and said look no we've got your back and

535
00:22:16,550 --> 00:22:14,880
I chrome over it there's something that

536
00:22:17,900 --> 00:22:16,560
an email from the Norwegian skeptic so

537
00:22:20,840 --> 00:22:17,910
they let me know we're following you and

538
00:22:22,130 --> 00:22:20,850

we're behind you and and you know when I

539

00:22:24,470 --> 00:22:22,140

want my case I think the Toronto

540

00:22:26,480 --> 00:22:24,480

skeptics had a big party big cake I

541

00:22:28,940 --> 00:22:26,490

really means a lot that you're part of

542

00:22:30,800 --> 00:22:28,950

this community of people and okay we

543

00:22:32,170 --> 00:22:30,810

disagree amongst ourselves sometimes but

544

00:22:34,970 --> 00:22:32,180

we all care about the fact that

545

00:22:37,370 --> 00:22:34,980

rationality is important and there is a

546

00:22:39,440 --> 00:22:37,380

skeptical method and it's standing up

547

00:22:42,110 --> 00:22:39,450

for skepticism and free speech is

548

00:22:43,340 --> 00:22:42,120

important it is and just just it's just

549

00:22:45,920 --> 00:22:43,350

reminded me there's a copy of the

550

00:22:47,210 --> 00:22:45,930

skeptic magazine of giving you which is

551
00:22:49,310 --> 00:22:47,220
covered with ants at the moment that's

552
00:22:51,980 --> 00:22:49,320
fair because we're out here on the

553
00:22:54,110 --> 00:22:51,990
street and you probably being the sort

554
00:22:59,540 --> 00:22:54,120
of chavier you probably know this but

555
00:23:01,850 --> 00:22:59,550
the the Australian skeptics at our

556
00:23:03,860 --> 00:23:01,860
convention last year awarded our annual

557
00:23:07,070 --> 00:23:03,870
bent spoon prize to the chiropractors

558
00:23:09,110 --> 00:23:07,080
and there's probably there's someone you

559
00:23:11,450 --> 00:23:09,120
might not yeah I'm just looking for the

560
00:23:13,400 --> 00:23:11,460
magazine that moment oh wait it may be

561
00:23:16,000 --> 00:23:13,410
may well be in there but yeah we awarded

562
00:23:18,620 --> 00:23:16,010
the chiropractor's of Australia for not

563
00:23:20,960 --> 00:23:18,630

enforcing their own regulations and all

564

00:23:22,520 --> 00:23:20,970

this other stuff yeah the chiropractic

565

00:23:24,230 --> 00:23:22,530

community around the world seems to be

566

00:23:26,270 --> 00:23:24,240

in a spin because there are some

567

00:23:28,190 --> 00:23:26,280

chiropractors who know their limits in

568

00:23:30,050 --> 00:23:28,200

fact chiropractors would come to me and

569

00:23:31,840 --> 00:23:30,060

say look we support you you know we

570

00:23:34,430 --> 00:23:31,850

might disagree with what you have to say

571

00:23:36,500 --> 00:23:34,440

and actually some extent we agree with

572

00:23:37,880 --> 00:23:36,510

what you say in some cases and we can

573

00:23:42,230 --> 00:23:37,890

see that there's something rotten within

574

00:23:43,670 --> 00:23:42,240

our community but but but there some of

575

00:23:46,640 --> 00:23:43,680

them are scared to stand up and speak

576

00:23:48,110 --> 00:23:46,650

out and these regulatory bodies are in a

577

00:23:50,150 --> 00:23:48,120

bind because they know what they should

578

00:23:51,260 --> 00:23:50,160

do yeah but they know that a lot of

579

00:23:53,090 --> 00:23:51,270

their members aren't going to listen to

580

00:23:56,120 --> 00:23:53,100

a lot of their members are true

581

00:23:57,860 --> 00:23:56,130

believers yeah absolutely and I think in

582

00:24:00,110 --> 00:23:57,870

many cases is it is about it and

583

00:24:02,390 --> 00:24:00,120

honestly held belief yes now these

584

00:24:04,040 --> 00:24:02,400

people have studied chiropractic they

585

00:24:04,850 --> 00:24:04,050

devoted themselves to carp rages the

586

00:24:06,590 --> 00:24:04,860

feedback

587

00:24:10,250 --> 00:24:06,600

their patients which convinces there I

588

00:24:12,140 --> 00:24:10,260

am you may have caught my talk somewhere

589

00:24:14,600 --> 00:24:12,150

on the walk I talked about this feedback

590

00:24:16,250 --> 00:24:14,610

effect yeah where specifically of

591

00:24:20,020 --> 00:24:16,260

psychics but also with alternative

592

00:24:22,549 --> 00:24:20,030

medicine healers where their clients

593

00:24:24,200 --> 00:24:22,559

believe they have benefit the clients

594

00:24:25,640 --> 00:24:24,210

give this feedback back to the

595

00:24:27,560 --> 00:24:25,650

practitioner the practitioner is getting

596

00:24:30,169 --> 00:24:27,570

this consonant good feedback of course

597

00:24:33,500 --> 00:24:30,179

they believe it yeah the classic example

598

00:24:35,000 --> 00:24:33,510

opposes taluk that their parents at

599

00:24:37,909 --> 00:24:35,010

their wit's end with babies that are

600

00:24:39,440 --> 00:24:37,919

just crying relentlessly they put up

601
00:24:41,120 --> 00:24:39,450
with it for a few weeks have gone to

602
00:24:42,740 --> 00:24:41,130
their GP they put up with it a few more

603
00:24:45,890 --> 00:24:42,750
weeks they eventually going to see a

604
00:24:47,510 --> 00:24:45,900
chiropractor and within a few weeks it's

605
00:24:48,620 --> 00:24:47,520
come to an end because eventually call

606
00:24:50,750 --> 00:24:48,630
it does come to that but the

607
00:24:52,700 --> 00:24:50,760
chiropractor gets the credit the

608
00:24:55,100 --> 00:24:52,710
chiropractor rightly feel doesn't

609
00:24:56,330 --> 00:24:55,110
rightly feel but they understandably

610
00:24:59,150 --> 00:24:56,340
feel that they've done something good

611
00:25:01,760 --> 00:24:59,160
the parents become a walking advert but

612
00:25:03,169 --> 00:25:01,770
when you do the clinical trial you know

613
00:25:04,850 --> 00:25:03,179

you take 100 babies you get into a

614

00:25:06,890 --> 00:25:04,860

chiropractor taking another hundred

615

00:25:09,470 --> 00:25:06,900

babies just give them to a nurse and the

616

00:25:10,940 --> 00:25:09,480

nurse just holds the baby return the

617

00:25:12,500 --> 00:25:10,950

babies to their parents the parents have

618

00:25:15,409 --> 00:25:12,510

no idea whether their child is seeing a

619

00:25:17,870 --> 00:25:15,419

chiropractor or a nurse the results are

620

00:25:19,220 --> 00:25:17,880

exactly the same babies eventually get

621

00:25:21,289 --> 00:25:19,230

better from colleagues what he learned

622

00:25:23,840 --> 00:25:21,299

from that that's right well Simon it

623

00:25:25,100 --> 00:25:23,850

thank you so much for giving me some of

624

00:25:27,200 --> 00:25:25,110

your time I know you're sore still

625

00:25:29,000 --> 00:25:27,210

getting over the trip and jet lag and

626

00:25:30,680 --> 00:25:29,010

all the fun of being in Sydney and

627

00:25:32,659 --> 00:25:30,690

there's a fire truck just up the street

628

00:25:35,299 --> 00:25:32,669

I don't know what it's doing luckily the

629

00:25:37,280 --> 00:25:35,309

sirens aren't on it's a nice day I think

630

00:25:39,230 --> 00:25:37,290

I hope you enjoy the rest of your daddy

631

00:25:41,600 --> 00:25:39,240

Ric always love coming to Australia and

632

00:25:43,100 --> 00:25:41,610

so so really looking forward to having a

633

00:25:44,150 --> 00:25:43,110

bit of a holiday in a bit of work and

634

00:25:46,190 --> 00:25:44,160

bit of family it's gonna be a really

635

00:26:02,650 --> 00:25:46,200

lovely tripping but reporter Simon Singh

636

00:26:07,970 --> 00:26:05,270

now on Belfast FM we turn to the person

637

00:26:10,070 --> 00:26:07,980

lads easygoing and confident skeptic

638

00:26:12,530 --> 00:26:10,080

seeks other critical thinkers for fun

639

00:26:14,510 --> 00:26:12,540

laughter and good times must be willing

640

00:26:16,400 --> 00:26:14,520

to apply logic liberally and a good

641

00:26:18,470 --> 00:26:16,410

listener expect something new and

642

00:26:20,480 --> 00:26:18,480

interesting every month come and meet me

643

00:26:22,340 --> 00:26:20,490

in Belfast in Northern Ireland if this

644

00:26:25,910 --> 00:26:22,350

sounds like you check out my profile on

645

00:26:34,370 --> 00:26:25,920

bail for skeptics calm music by Kevin

646

00:26:36,680 --> 00:26:34,380

MacLeod welcome to a week in science

647

00:26:39,380 --> 00:26:36,690

from RI oz bringing you the science news

648

00:26:42,410 --> 00:26:39,390

you need to know this week we're looking

649

00:26:44,300 --> 00:26:42,420

forward to 2014 and making our

650

00:26:46,310 --> 00:26:44,310

predictions that what will be big in

651
00:26:50,010 --> 00:26:46,320
science

652
00:26:53,010 --> 00:26:50,020
we're expecting that 2014 will be a big

653
00:26:55,289 --> 00:26:53,020
year in space exploration last year

654
00:26:57,570 --> 00:26:55,299
china and india launch probes to the

655
00:26:59,279 --> 00:26:57,580
moon and mars while NASA Rovers

656
00:27:01,919 --> 00:26:59,289
continued their work on the red planet

657
00:27:05,460 --> 00:27:01,929
with these programs generating results

658
00:27:07,710 --> 00:27:05,470
in 2014 and a new wave of private

659
00:27:09,630 --> 00:27:07,720
enterprise we may soon have a very

660
00:27:15,390 --> 00:27:09,640
different view of our place in the

661
00:27:18,330 --> 00:27:15,400
universe 2013 saw several steps towards

662
00:27:21,149 --> 00:27:18,340
the creation of a universal flu vaccine

663
00:27:22,919 --> 00:27:21,159

with research continuing into influenza

664

00:27:24,779 --> 00:27:22,929

don't be surprised to see some big

665

00:27:27,149 --> 00:27:24,789

announcements regarding our battle

666

00:27:29,399 --> 00:27:27,159

against this virus this could include

667

00:27:31,769 --> 00:27:29,409

the creation of a universal vaccine a

668

00:27:37,740 --> 00:27:31,779

single shock which protects against all

669

00:27:39,990 --> 00:27:37,750

types of flu in april 2013 barack obama

670

00:27:42,480 --> 00:27:40,000

announced the launch of a project to map

671

00:27:44,460 --> 00:27:42,490

the human brain while it may be too

672

00:27:47,610 --> 00:27:44,470

early to see any results of this project

673

00:27:50,010 --> 00:27:47,620

in 2014 keep an eye out for this in the

674

00:27:52,620 --> 00:27:50,020

future as scientists investigate how the

675

00:27:54,690 --> 00:27:52,630

billions of brain cells interact this

676
00:27:58,860 --> 00:27:54,700
project may one day shed light into

677
00:28:01,500 --> 00:27:58,870
Alzheimer's and epilepsy we also

678
00:28:03,870 --> 00:28:01,510
predicted in 2014 there will be a

679
00:28:06,060 --> 00:28:03,880
breakthrough in quantum computing the

680
00:28:10,649 --> 00:28:06,070
problem is we probably won't be able to

681
00:28:13,260 --> 00:28:10,659
explain it and finally you've heard of

682
00:28:16,710 --> 00:28:13,270
3d printing well get ready for the next

683
00:28:18,899 --> 00:28:16,720
big thing 4d printing 4d printing

684
00:28:21,120 --> 00:28:18,909
involves printing shapes or structures

685
00:28:23,039 --> 00:28:21,130
like 3d printing however these

686
00:28:26,250 --> 00:28:23,049
structures can then be activated to

687
00:28:29,310 --> 00:28:26,260
self-assemble into other shapes this

688
00:28:32,430 --> 00:28:29,320

really is super cool that's our

689

00:28:33,990 --> 00:28:32,440

predictions for 2014 so keep watching a

690

00:28:36,360 --> 00:28:34,000

week in science through the year to find

691

00:28:37,919 --> 00:28:36,370

out which ones we got right you can also

692

00:28:41,100 --> 00:28:37,929

follow us on Twitter using the hashtag

693

00:28:43,080 --> 00:28:41,110

week in sy and like us on Facebook I'm

694

00:29:05,210 --> 00:28:43,090

poor Willis and I'll see you back here

695

00:29:10,380 --> 00:29:08,760

hi I'm audit oh yeah crystal or evil

696

00:29:12,060 --> 00:29:10,390

tips advice on logic lifted off the

697

00:29:14,070 --> 00:29:12,070

skeptics ohm ohm skipped a comedian or

698

00:29:15,540 --> 00:29:14,080

again if it's not a blog get upper bleph

699

00:29:16,890 --> 00:29:15,550

or podcast often and against capsis

700

00:29:19,500 --> 00:29:16,900

driven me like if I'm a flock to this

701
00:29:21,660 --> 00:29:19,510
match centre of escape system and low or

702
00:29:23,490 --> 00:29:21,670
high / versus the deep plane or jected

703
00:29:25,170 --> 00:29:23,500
and calendar / escape disc after death

704
00:29:27,030 --> 00:29:25,180
online cuted on will escape this killer

705
00:29:28,830 --> 00:29:27,040
sausage escapes his blog in okla 30

706
00:29:31,440 --> 00:29:28,840
Emily Oh discrete areas hefty passes for

707
00:29:34,950 --> 00:29:31,450
domestic inna de estado yourself skips a

708
00:29:36,780 --> 00:29:34,960
stop mo hello I'm moderate and I'm

709
00:29:38,700 --> 00:29:36,790
Kristin and we want to let you know that

710
00:29:40,650 --> 00:29:38,710
there are lots of Norwegian skeptics for

711
00:29:42,060 --> 00:29:40,660
you to get to know there are blogs and

712
00:29:43,740 --> 00:29:42,070
pub meets and a podcast and the

713
00:29:45,870 --> 00:29:43,750

Norwegian skeptics also do paranormal

714

00:29:48,210 --> 00:29:45,880

tests and consumer activism to find out

715

00:29:57,309 --> 00:29:48,220

more Google Norwegian skeptics or visit

716

00:30:05,310 --> 00:30:01,909

here's my not spooky action at a

717

00:30:10,210 --> 00:30:08,350

well welcome to Maynard spooky action at

718

00:30:11,620 --> 00:30:10,220

a distance and we haven't gone with

719

00:30:13,600 --> 00:30:11,630

elegant as far as the crown hotel

720

00:30:16,030 --> 00:30:13,610

tonight where the first meeting of

721

00:30:17,950 --> 00:30:16,040

skeptics in the pub for 2014 is roaring

722

00:30:20,440 --> 00:30:17,960

away we have Jessica hi Jessica how are

723

00:30:22,750 --> 00:30:20,450

you hey I'm very well how are you I'm

724

00:30:24,400 --> 00:30:22,760

just fine and fit and fantastic because

725

00:30:26,050 --> 00:30:24,410

I haven't been back to work yet me

726

00:30:28,900 --> 00:30:26,060

neither I know it's a wonderful feeling

727

00:30:30,520 --> 00:30:28,910

isn't it is a great feeling and because

728

00:30:33,220 --> 00:30:30,530

we're offering so good with feeling in

729

00:30:35,710 --> 00:30:33,230

connection with the psychic ed that

730

00:30:38,020 --> 00:30:35,720

we're all a part of we can just dip into

731

00:30:39,280 --> 00:30:38,030

and have a prediction for 2014 now

732

00:30:41,650 --> 00:30:39,290

remember these will be played back like

733

00:30:43,270 --> 00:30:41,660

last year you predicted larva lot of

734

00:30:44,530 --> 00:30:43,280

lava now I'm sure there was lava around

735

00:30:45,820 --> 00:30:44,540

the world but I don't know what you were

736

00:30:50,260 --> 00:30:45,830

thinking of what were you thinking of

737

00:30:52,300 --> 00:30:50,270

last year ah good question i'm tuning in

738

00:30:54,100 --> 00:30:52,310

now tuning into the vibe churning

739

00:30:57,220 --> 00:30:54,110

churning Jenny yeah I can't remember

740

00:30:59,380 --> 00:30:57,230

it's too long ago and do it too much

741

00:31:00,820 --> 00:30:59,390

alcohol let's wipe that one let's go

742

00:31:05,470 --> 00:31:00,830

with 2014 what are your predictions

743

00:31:08,740 --> 00:31:05,480

Jessica 14 2014 okay the alcohol will

744

00:31:10,600 --> 00:31:08,750

flow skeptics in the pub a good time

745

00:31:13,150 --> 00:31:10,610

will be had by all there will be lots

746

00:31:16,000 --> 00:31:13,160

and lots of interesting speakers and fun

747

00:31:19,780 --> 00:31:16,010

and good discussions and excellent talks

748

00:31:21,130 --> 00:31:19,790

and generally good times had by all did

749

00:31:23,650 --> 00:31:21,140

you feel that any one of the ABC is

750

00:31:26,140 --> 00:31:23,660

getting sacked to this year oh that's

751

00:31:29,620 --> 00:31:26,150

what you asked me last year I will I

752

00:31:32,440 --> 00:31:29,630

will say no okay no no one no one at the

753

00:31:37,120 --> 00:31:32,450

ABC will be sacked but they will have a

754

00:31:40,600 --> 00:31:37,130

good time dragging they're dragging

755

00:31:43,060 --> 00:31:40,610

their employer through the mud by their

756

00:31:44,380 --> 00:31:43,070

heels backwards Wow goodness me like

757

00:31:46,780 --> 00:31:44,390

that could be there come on be the head

758

00:31:49,300 --> 00:31:46,790

of the 730 report that does that it

759

00:31:51,190 --> 00:31:49,310

could be anybody in the ABC well I love

760

00:31:53,230 --> 00:31:51,200

how you specific to such a large amount

761

00:31:55,900 --> 00:31:53,240

of people it's a male yeah it's it's a

762

00:31:58,360 --> 00:31:55,910

neck isn't it psychic predictions and

763

00:32:00,160 --> 00:31:58,370

and that's the secret just keep it

764

00:32:02,350 --> 00:32:00,170

general now what starsign you reckons

765

00:32:05,620 --> 00:32:02,360

gonna have a big year this year ah look

766

00:32:07,600 --> 00:32:05,630

me Scorpio has to be a Scorpio year

767

00:32:09,490 --> 00:32:07,610

definitely known as wild roses to

768

00:32:12,880 --> 00:32:09,500

Scorpio they're also the most murdered

769

00:32:15,070 --> 00:32:12,890

star sign oh well i will learn

770

00:32:18,610 --> 00:32:15,080

I won't say anything on the grounds that

771

00:32:20,500 --> 00:32:18,620

I mayen criminate myself ok now we'll

772

00:32:22,360 --> 00:32:20,510

look at what are you looking into your

773

00:32:25,630 --> 00:32:22,370

crystal ball of blast there and what do

774

00:32:28,030 --> 00:32:25,640

you say well I'm absolutely positive

775

00:32:31,170 --> 00:32:28,040

that there'll be a very big natural

776

00:32:35,170 --> 00:32:31,180

disaster in an underdeveloped country

777

00:32:36,730 --> 00:32:35,180

during 2014 I'm positive I can see it I

778

00:32:38,050 --> 00:32:36,740

can feel it it's definitely going to

779

00:32:39,580 --> 00:32:38,060

happen you're going to be a bit more

780

00:32:41,140 --> 00:32:39,590

specific I want to go with the Pacific

781

00:32:42,640 --> 00:32:41,150

Ring of Fire just to make it a bit more

782

00:32:44,590 --> 00:32:42,650

interesting well you know the Ring of

783

00:32:46,180 --> 00:32:44,600

Fire is always good candidate because

784

00:32:48,190 --> 00:32:46,190

then you've got your earthquakes you've

785

00:32:49,990 --> 00:32:48,200

got your tsunamis coming from that and

786

00:32:53,320 --> 00:32:50,000

it's also very volatile in terms of

787

00:32:55,480 --> 00:32:53,330

cyclones and typhoons and those kinds of

788

00:32:58,120 --> 00:32:55,490

things so definitely something that will

789

00:33:00,490 --> 00:32:58,130

be exacerbated by climate change you

790

00:33:03,850 --> 00:33:00,500

want to call a scientific prediction at

791

00:33:06,580 --> 00:33:03,860

all for 2014 in to in 2014 we're on the

792

00:33:08,350 --> 00:33:06,590

crux of some very significant scientific

793

00:33:10,180 --> 00:33:08,360

breakthroughs I don't want to give it

794

00:33:11,830 --> 00:33:10,190

away I want everyone to be surprised but

795

00:33:15,910 --> 00:33:11,840

something big is going to be happening

796

00:33:17,760 --> 00:33:15,920

life-changing life-saving in 2014 do you

797

00:33:21,430 --> 00:33:17,770

think they'll finally cure embarrassment

798

00:33:23,410 --> 00:33:21,440

definitely not and here we are we're at

799

00:33:26,110 --> 00:33:23,420

the end of a very busy talking table

800

00:33:27,910 --> 00:33:26,120

here what's your name sir chris ok Chris

801
00:33:31,440 --> 00:33:27,920
what do you got for predictions of 2014

802
00:33:34,330 --> 00:33:31,450
for us man well my main prediction is

803
00:33:40,230 --> 00:33:34,340
halfway through the year Alan Jones will

804
00:33:44,110 --> 00:33:40,240
announce I'm 2gb that he's now a climate

805
00:33:45,250 --> 00:33:44,120
change believer no why would you predict

806
00:33:47,170 --> 00:33:45,260
that you just got a feeling in your

807
00:33:48,760 --> 00:33:47,180
bones is there something about illogical

808
00:33:51,460 --> 00:33:48,770
probability well I didn't have why this

809
00:33:53,700 --> 00:33:51,470
one cognitive dissonance because I think

810
00:33:57,190 --> 00:33:53,710
the government

811
00:34:00,210 --> 00:33:57,200
moving ahead with global warming carbon

812
00:34:05,170 --> 00:34:00,220
tax and laws and so on to restrict

813
00:34:07,330 --> 00:34:05,180

carbon mr. Jones can't stay at climate

814

00:34:09,159 --> 00:34:07,340

denier so what do you think would be the

815

00:34:10,780 --> 00:34:09,169

tipping point what do you do the point

816

00:34:12,159 --> 00:34:10,790

we'd have to go I've got to go with it

817

00:34:14,889 --> 00:34:12,169

now what I think the thing will happen

818

00:34:18,129 --> 00:34:14,899

that will have to be that thing oh he'll

819

00:34:22,750 --> 00:34:18,139

he'll read up on on some science and

820

00:34:24,430 --> 00:34:22,760

look at the facts and accept that okay

821

00:34:27,010 --> 00:34:24,440

well we'll have we'll see if that

822

00:34:30,070 --> 00:34:27,020

happens in 2014 a bold decision that

823

00:34:31,869 --> 00:34:30,080

bowl thank you i'll come down the arm

824

00:34:34,690 --> 00:34:31,879

down at the disreputable end of the

825

00:34:38,080 --> 00:34:34,700

meeting now and we're going now you've

826

00:34:40,570 --> 00:34:38,090

got some half important predictions for

827

00:34:44,139 --> 00:34:40,580

us here the worst one of all sydney

828

00:34:46,030 --> 00:34:44,149

property prices crash I think the bubble

829

00:34:47,500 --> 00:34:46,040

will finally burst and the my rent in

830

00:34:49,300 --> 00:34:47,510

glebe will be a bit reasonable for a

831

00:34:52,210 --> 00:34:49,310

change I read also kick off our bucket

832

00:34:53,710 --> 00:34:52,220

out no no I know a bit you can walk into

833

00:34:55,720 --> 00:34:53,720

a place for about half of what it would

834

00:34:57,670 --> 00:34:55,730

be now do you think that'll be across

835

00:34:59,260 --> 00:34:57,680

the whole area or will still get the

836

00:35:01,510 --> 00:34:59,270

areas like you're not sure and that

837

00:35:04,270 --> 00:35:01,520

they'll still maintain a bubble stuff on

838

00:35:05,470 --> 00:35:04,280

stuff up yeah he cares about them so you

839

00:35:07,690 --> 00:35:05,480

want to pick a month the bubble will

840

00:35:11,050 --> 00:35:07,700

burst on Sydney property that's a bold

841

00:35:12,550 --> 00:35:11,060

one year come on up look to America when

842

00:35:15,730 --> 00:35:12,560

that crash is when they can't print any

843

00:35:17,680 --> 00:35:15,740

more money okay well okay well that's

844

00:35:20,080 --> 00:35:17,690

that's bold anyone else want a good

845

00:35:21,610 --> 00:35:20,090

prediction here at all I don't know I'm

846

00:35:24,040 --> 00:35:21,620

not so certain that there would be a

847

00:35:25,290 --> 00:35:24,050

crash i mean i think that there's a lot

848

00:35:29,640 --> 00:35:25,300

of

849

00:35:32,970 --> 00:35:29,650

buyers maybe maybe eastern suburbs issue

850

00:35:35,010 --> 00:35:32,980

and say some of the new Asian areas

851

00:35:37,320 --> 00:35:35,020

they're not but they're not people it's

852

00:35:38,820 --> 00:35:37,330

not a bubble because they're not buying

853

00:35:41,430 --> 00:35:38,830

them in the hopes of selling them off

854

00:35:42,480 --> 00:35:41,440

later so if you're buying the house not

855

00:35:44,310 --> 00:35:42,490

something off you're going to raise a

856

00:35:46,260 --> 00:35:44,320

family there that's not a bubble because

857

00:35:47,640 --> 00:35:46,270

you're not planning to sell it and then

858

00:35:49,800 --> 00:35:47,650

finding out that you can't get as much

859

00:35:53,610 --> 00:35:49,810

as what you bought for a true although

860

00:35:56,270 --> 00:35:53,620

you are paying too much yes yeah but

861

00:35:59,400 --> 00:35:56,280

that's not really what a bubbles about

862

00:36:00,720 --> 00:35:59,410

okay all right so you probably so the

863

00:36:02,190 --> 00:36:00,730

people will still be ripped off to the

864

00:36:04,260 --> 00:36:02,200

being ripped off now just the investors

865

00:36:06,930 --> 00:36:04,270

will leave and won't be able to sell

866

00:36:08,220 --> 00:36:06,940

again for a while pretty much yeah okay

867

00:36:11,640 --> 00:36:08,230

that's good why didn't you say something

868

00:36:14,340 --> 00:36:11,650

as eloquent as him 3 b's and more yeah

869

00:36:15,570 --> 00:36:14,350

fair enough that's okay I'm not look as

870

00:36:17,280 --> 00:36:15,580

I must dress it out there are fairly

871

00:36:18,930 --> 00:36:17,290

rough predictions here so you want to

872

00:36:21,690 --> 00:36:18,940

take a go at any predictions for 2014

873

00:36:23,460 --> 00:36:21,700

okay i think by the end of 2014

874

00:36:28,590 --> 00:36:23,470

everybody will have forgotten about

875

00:36:30,690 --> 00:36:28,600

Edward Snowden yes he's gonna drip feed

876

00:36:32,340 --> 00:36:30,700

the stuff out bit by bit army and of

877

00:36:34,860 --> 00:36:32,350

course will and he will have stuff going

878

00:36:37,020 --> 00:36:34,870

on by December still but people will

879

00:36:39,030 --> 00:36:37,030

have forgotten about him anyway and

880

00:36:40,740 --> 00:36:39,040

that's the way though shut up Snowden

881

00:36:43,530 --> 00:36:40,750

they'll ever press conference of people

882

00:36:44,790 --> 00:36:43,540

go shut up yes basically okay then do

883

00:36:46,710 --> 00:36:44,800

you what do you reckon he might be a

884

00:36:48,570 --> 00:36:46,720

plant by another security organization

885

00:36:50,070 --> 00:36:48,580

like he might be with like the CIA or

886

00:36:51,450 --> 00:36:50,080

something and he's there to discredit

887

00:36:54,870 --> 00:36:51,460

the NSA dude what do you think of that

888

00:36:56,910 --> 00:36:54,880

theory it's it's too complicated i think

889

00:37:01,170 --> 00:36:56,920

it's just what he appears on the surface

890

00:37:02,940 --> 00:37:01,180

you know Occam's razor I know okay now

891

00:37:05,430 --> 00:37:02,950

what's your predictions for 2014 serve

892

00:37:07,560 --> 00:37:05,440

24 going on om have to what's your name

893

00:37:10,680 --> 00:37:07,570

to so when we played back week we can we

894

00:37:13,320 --> 00:37:10,690

can still name & shamian Richard okay

895

00:37:14,550 --> 00:37:13,330

okay it's the it's the great Richard

896

00:37:18,250 --> 00:37:14,560

what do you got coming at us which it

897

00:37:21,920 --> 00:37:18,260

wouldn't be I don't think I'm so great

898

00:37:25,880 --> 00:37:21,930

I predict the media is going to mistake

899

00:37:28,040 --> 00:37:25,890

the Navy's new new arm lhd for an

900

00:37:29,690 --> 00:37:28,050

aircraft carrier are they going to call

901

00:37:31,970 --> 00:37:29,700

it that why because it's because it's

902

00:37:35,090 --> 00:37:31,980

closest thing we've got to it I believe

903

00:37:37,610 --> 00:37:35,100

so yes it looks like one but it's it's a

904

00:37:39,680 --> 00:37:37,620

little bit more about so they'll come up

905

00:37:41,510 --> 00:37:39,690

with some cute word like our mini

906

00:37:46,910 --> 00:37:41,520

aircraft carrier or else I don't know

907

00:37:48,590 --> 00:37:46,920

that probably probably okay media get

908

00:37:50,090 --> 00:37:48,600

something wrong with the Navy yet again

909

00:37:52,130 --> 00:37:50,100

that's a good prediction what's your

910

00:37:55,910 --> 00:37:52,140

name so much your prediction welcome no

911

00:37:57,530 --> 00:37:55,920

hello Malcolm that's not like a deal the

912

00:37:59,900 --> 00:37:57,540

amazing Malcolm be looked into crystal

913

00:38:02,560 --> 00:37:59,910

ball what do you see you might find the

914

00:38:05,390 --> 00:38:02,570

climate changes of a fallacy improved

915

00:38:07,810 --> 00:38:05,400

role and that's not teaching it in

916

00:38:10,970 --> 00:38:07,820

schools and give them other options of

917

00:38:13,360 --> 00:38:10,980

considerations and how men kind

918

00:38:16,310 --> 00:38:13,370

affecting the earth and so forth that

919

00:38:18,830 --> 00:38:16,320

next add laterally prediction not too

920

00:38:20,780 --> 00:38:18,840

sure okay but the world should she'll be

921

00:38:23,870 --> 00:38:20,790

here by the end of next year anyhow I

922

00:38:25,100 --> 00:38:23,880

like that one that's a good one I'm

923

00:38:26,720 --> 00:38:25,110

gonna step in boldly I'm going to

924

00:38:28,790 --> 00:38:26,730

predict the return and polo neck

925

00:38:30,860 --> 00:38:28,800

skivvies in black the Steve Jobs look is

926

00:38:32,660 --> 00:38:30,870

going to be big this year and I think

927

00:38:35,000 --> 00:38:32,670

girls will start wearing Hawaiian shirts

928

00:38:36,440 --> 00:38:35,010

more that's my prediction and what is

929

00:38:37,790 --> 00:38:36,450

your name so we can name in shame you

930

00:38:40,460 --> 00:38:37,800

when we play this back okay it's

931

00:38:43,460 --> 00:38:40,470

Margaret and Tate and I predict gay

932

00:38:45,860 --> 00:38:43,470

marriage legalized and you want but a

933

00:38:47,690 --> 00:38:45,870

state or a month or what do I put it'll

934

00:38:49,340 --> 00:38:47,700

work but put a qualifier I come on make

935

00:38:51,680 --> 00:38:49,350

it fun for us no don't get the whole

936

00:38:55,330 --> 00:38:51,690

year that's no no no no you sometime

937

00:38:59,480 --> 00:38:55,340

this year but you know oh ok let's say

938

00:39:01,530 --> 00:38:59,490

November yeah okay why not okay that's

939

00:39:06,630 --> 00:39:01,540

not bad anything else

940

00:39:08,640 --> 00:39:06,640

a hot decriminalized oh that's a big

941

00:39:11,100 --> 00:39:08,650

cool well for one you know be good and

942

00:39:15,750 --> 00:39:11,110

wicked you're going you're going

943

00:39:18,030 --> 00:39:15,760

federally here or as stating oh well

944

00:39:21,780 --> 00:39:18,040

it'll have to be a state thing I think

945

00:39:23,490 --> 00:39:21,790

yeah yep and what you're gonna call

946

00:39:26,640 --> 00:39:23,500

Tasmania gym I think it's terrace Manny

947

00:39:28,710 --> 00:39:26,650

because they need the business ok can I

948

00:39:30,090 --> 00:39:28,720

think is there a sense if this year's

949

00:39:32,010 --> 00:39:30,100

it's not is it there's not another

950

00:39:35,300 --> 00:39:32,020

census for sure we're not gonna find out

951

00:39:38,640 --> 00:39:35,310

but I would say like atheism will

952

00:39:42,270 --> 00:39:38,650

increase from the twenty percent it is

953

00:39:44,400 --> 00:39:42,280

now to thirty percent 80 that'd be great

954

00:39:46,470 --> 00:39:44,410

like Sweden I'd love that that's a bulb

955

00:39:47,910 --> 00:39:46,480

on Tim ok Tim now you pulled a few fast

956

00:39:50,910 --> 00:39:47,920

ones with your predictions last year

957

00:39:52,530 --> 00:39:50,920

when usual via pallava you gonna see the

958

00:39:54,420 --> 00:39:52,540

amazing team is written on the side of

959

00:39:55,590 --> 00:39:54,430

your tent at the new town festival in

960

00:39:58,560 --> 00:39:55,600

India there what are you going to

961

00:40:00,630 --> 00:39:58,570

predict for 2014 well I mean I'd like to

962

00:40:02,850 --> 00:40:00,640

keep him general okay not too specific

963

00:40:04,320 --> 00:40:02,860

right because they always come true but

964

00:40:05,820 --> 00:40:04,330

I will predict that someone will make a

965

00:40:07,680 --> 00:40:05,830

prediction this year about the end of

966

00:40:10,380 --> 00:40:07,690

the world that's my prediction that

967

00:40:11,730 --> 00:40:10,390

there will be a prediction right I have

968

00:40:13,980 --> 00:40:11,740

to say I stole that one but I have to be

969

00:40:15,870 --> 00:40:13,990

honest right but I like it anyway right

970

00:40:18,480 --> 00:40:15,880

I will predict that someone will predict

971

00:40:20,520 --> 00:40:18,490

that marijuana will be legalized and

972

00:40:21,630 --> 00:40:20,530

that some poor sod is going to believe

973

00:40:24,330 --> 00:40:21,640

that gay marriage is going to be

974

00:40:26,760 --> 00:40:24,340

legalized to deliver live we can all

975

00:40:29,310 --> 00:40:26,770

hope in vain car we all hope of that my

976

00:40:33,360 --> 00:40:29,320

prediction that that really will happen

977

00:40:36,140 --> 00:40:33,370

is that you're going to grab the limb

978

00:40:38,370 --> 00:40:36,150

that the avian under whatever the

979

00:40:41,940 --> 00:40:38,380

anti-vaccination network under whatever

980

00:40:44,250 --> 00:40:41,950

name it becomes will be defunct by the

981

00:40:45,930 --> 00:40:44,260

end of the year and when you define the

982

00:40:47,460 --> 00:40:45,940

funk like they'll be disbanded or the

983

00:40:51,150 --> 00:40:47,470

membership will get their money back or

984

00:40:52,440 --> 00:40:51,160

how does that work was defunct does that

985

00:40:53,670 --> 00:40:52,450

mean they're going to go into musicals

986

00:40:54,750 --> 00:40:53,680

okay now I'm gonna be cynical the

987

00:40:57,870 --> 00:40:54,760

membership will not get their money back

988

00:40:59,880 --> 00:40:57,880

but i think the organization will will

989

00:41:01,830 --> 00:40:59,890

dissolve it might become something else

990

00:41:05,310 --> 00:41:01,840

right i mean they have a tendency to

991

00:41:08,250 --> 00:41:05,320

resurface but i think that that

992

00:41:10,860 --> 00:41:08,260

organization will suddenly find there's

993

00:41:13,400 --> 00:41:10,870

lack of carpet under its feet okay now

994

00:41:17,030 --> 00:41:13,410

what now what starsign will have a big

995

00:41:19,550 --> 00:41:17,040

you this year Ophiuchus that that 14th

996

00:41:20,750 --> 00:41:19,560

one is that's a 1320 their 40th well I

997

00:41:22,550 --> 00:41:20,760

don't know another way London I mean

998

00:41:24,650 --> 00:41:22,560

there are any way ya know whether

999

00:41:26,840 --> 00:41:24,660

there's one of them there I would say my

1000

00:41:28,700 --> 00:41:26,850

prediction is that every star sign the

1001

00:41:31,850 --> 00:41:28,710

characteristic of the believer is that

1002

00:41:34,570 --> 00:41:31,860

you are gullible except for Aquarius in

1003

00:41:37,580 --> 00:41:34,580

which you are gorgeous and gullible fair

1004

00:41:40,100 --> 00:41:37,590

and look I can't figure out what your

1005

00:41:42,020 --> 00:41:40,110

star sign is in and i know i'm not going

1006

00:41:43,580 --> 00:41:42,030

to say actually with us deeper all right

1007

00:41:45,650 --> 00:41:43,590

now we've had a guy he's been over in

1008

00:41:46,790 --> 00:41:45,660

the corner working away on his ipad he

1009

00:41:48,110 --> 00:41:46,800

had a bit of a look at what might

1010

00:41:50,960 --> 00:41:48,120

actually happen this year what is your

1011

00:41:54,260 --> 00:41:50,970

name sir what do you predict my name is

1012

00:41:56,720 --> 00:41:54,270

Joshua God me and I have three stellar

1013

00:41:58,790 --> 00:41:56,730

predictions for the next 12 months so

1014

00:42:00,800 --> 00:41:58,800

following I storm hercules which is

1015

00:42:03,920 --> 00:42:00,810

currently hitting north more than a

1016

00:42:06,170 --> 00:42:03,930

America at the moment I predict the DC

1017

00:42:08,420 --> 00:42:06,180

summer in North America will be one of

1018

00:42:10,820 --> 00:42:08,430

the hottest on record and the entire

1019

00:42:12,500 --> 00:42:10,830

place will go up in flames oh and that

1020

00:42:15,920 --> 00:42:12,510

is it what so the atmosphere will

1021

00:42:18,020 --> 00:42:15,930

actually combust that's at all or it

1022

00:42:20,750 --> 00:42:18,030

will reach critical mass in all of

1023

00:42:22,790 --> 00:42:20,760

norman north america god well let's put

1024

00:42:24,440 --> 00:42:22,800

a number on it how many and let's go

1025

00:42:25,640 --> 00:42:24,450

degrees fahrenheit that's the way they

1026

00:42:27,830 --> 00:42:25,650

work over there how many degrees

1027

00:42:31,990 --> 00:42:27,840

fahrenheit higher than average will it

1028

00:42:35,000 --> 00:42:32,000

be across the US this year 2014 sir oh

1029

00:42:36,410 --> 00:42:35,010

that's a that's a tough one so you see

1030

00:42:38,150 --> 00:42:36,420

psychics don't normally get asked the

1031

00:42:39,590 --> 00:42:38,160

number like that do that that's right

1032

00:42:41,090 --> 00:42:39,600

because you know you're the other guy

1033

00:42:43,880 --> 00:42:41,100

with the ipad with the good photos on it

1034

00:42:48,230 --> 00:42:43,890

i thought i definitely i'd say 20

1035

00:42:50,720 --> 00:42:48,240

degrees above average 20 20 above that's

1036

00:42:52,970 --> 00:42:50,730

a that's a tall call but a bold one is

1037

00:42:55,550 --> 00:42:52,980

indeed a bold one okay well we'll get

1038

00:42:57,290 --> 00:42:55,560

back to you next year I've got this is

1039

00:43:00,410 --> 00:42:57,300

probably my best prediction for next

1040

00:43:03,140 --> 00:43:00,420

year so Kim jong-un of North Korea will

1041

00:43:04,859 --> 00:43:03,150

be assassinated by Dennis Rodman whoa

1042

00:43:07,440 --> 00:43:04,869

who will then do

1043

00:43:11,190 --> 00:43:07,450

then become the most popular leader in

1044

00:43:13,739 --> 00:43:11,200

North Korean history that's that's

1045

00:43:16,140 --> 00:43:13,749

that's my that's the concrete prediction

1046

00:43:18,150 --> 00:43:16,150

for the next 12 months what are the talk

1047

00:43:20,039 --> 00:43:18,160

or do you feel that anybody with the

1048

00:43:23,099 --> 00:43:20,049

name beginning with M will lose their

1049

00:43:25,460 --> 00:43:23,109

job at the ABC this year at all I'm not

1050

00:43:28,230 --> 00:43:25,470

sure I can comment on huh not should I

1051
00:43:29,670 --> 00:43:28,240
yeah it is a little bit of Justice there

1052
00:43:32,339 --> 00:43:29,680
that you can't factor it isn't there

1053
00:43:34,620 --> 00:43:32,349
there is indeed and anything else you

1054
00:43:37,109 --> 00:43:34,630
got there I do but this one's a bit of a

1055
00:43:38,819 --> 00:43:37,119
silly one I'll ask you visit what we

1056
00:43:41,819 --> 00:43:38,829
know what starsign will have a huge year

1057
00:43:44,160 --> 00:43:41,829
this year in 2014 well it's definitely

1058
00:43:46,769 --> 00:43:44,170
Taurus because i'm planning on rocking

1059
00:43:48,359 --> 00:43:46,779
at this year okay thank you okay now

1060
00:43:50,279 --> 00:43:48,369
what's your.what because that was the

1061
00:43:51,569 --> 00:43:50,289
completely reasonable prediction what's

1062
00:43:53,940 --> 00:43:51,579
the ridiculous one you've got written

1063
00:43:56,190 --> 00:43:53,950

down there the ridiculous prediction is

1064

00:43:58,950 --> 00:43:56,200

that scientists will discover a method

1065

00:44:02,880 --> 00:43:58,960

of developing gills in Homo sapiens and

1066

00:44:06,569 --> 00:44:02,890

water world will become a reality wow

1067

00:44:07,859 --> 00:44:06,579

that's amazing that's amazing well don't

1068

00:44:10,130 --> 00:44:07,869

even maybe breath breathing underwater

1069

00:44:12,420 --> 00:44:10,140

you don't need the breath anymore

1070

00:44:14,640 --> 00:44:12,430

hanging them it now look this discussion

1071

00:44:16,079 --> 00:44:14,650

has broken out here over what a lot of

1072

00:44:17,789 --> 00:44:16,089

people universally think is the most

1073

00:44:20,249 --> 00:44:17,799

crap superhero of all time and that is

1074

00:44:22,349 --> 00:44:20,259

the man from Atlantis played by Patrick

1075

00:44:24,359 --> 00:44:22,359

Duffy of course from Dallas and we're

1076
00:44:26,549 --> 00:44:24,369
trying to speculate we can't remember he

1077
00:44:28,650 --> 00:44:26,559
did swim in a very unusual way he had

1078
00:44:30,120 --> 00:44:28,660
the pair of speedos to wear around the

1079
00:44:33,329 --> 00:44:30,130
place but did he breathe through gills

1080
00:44:38,940 --> 00:44:33,339
or not I don't think so i reckon he just

1081
00:44:42,479 --> 00:44:38,950
had really big lungs definitely the

1082
00:44:43,799 --> 00:44:42,489
worst superhero in history hmm it has

1083
00:44:45,089 --> 00:44:43,809
been pointed out many times into it's

1084
00:44:46,470 --> 00:44:45,099
worth mentioning okay how would he

1085
00:44:49,650 --> 00:44:46,480
reckoned people the man from atlantis

1086
00:44:52,319 --> 00:44:49,660
the most crap superhero ever okay yeah

1087
00:44:55,710 --> 00:44:52,329
seeing everyone's it didn't even know he

1088
00:44:57,269 --> 00:44:55,720

was things the unknown superhero well

1089

00:44:59,099 --> 00:44:57,279

there you have it just a whole bunch of

1090

00:45:00,720 --> 00:44:59,109

white wine talking or some skeptics who

1091

00:45:03,180 --> 00:45:00,730

really have their finger up the future

1092

00:45:21,359 --> 00:45:03,190

only the future can tell it's spooky

1093

00:45:25,509 --> 00:45:23,859

hey this is Jay novella from the

1094

00:45:27,430 --> 00:45:25,519

skeptics guide to the universe podcast

1095

00:45:29,289 --> 00:45:27,440

did you know that there are thousands of

1096

00:45:31,000 --> 00:45:29,299

skeptical reports interviews and

1097

00:45:33,730 --> 00:45:31,010

investigations going back to nineteen

1098

00:45:37,599 --> 00:45:33,740

eighty one free to download just visit w

1099

00:45:39,279 --> 00:45:37,609

WC epic coa you click the publications

1100

00:45:41,019 --> 00:45:39,289

link and enjoy almost every back issue

1101

00:45:42,819 --> 00:45:41,029

of the skeptic the journal from

1102

00:45:44,349 --> 00:45:42,829

australian skeptics you can also

1103

00:45:46,660 --> 00:45:44,359

subscribe online and get the latest

1104

00:45:48,670 --> 00:45:46,670

digital or hard copy of this the world's

1105

00:45:52,329 --> 00:45:48,680

second oldest skeptical magazine that's

1106

00:46:09,040 --> 00:45:52,339

ww skeptics com a you or just google

1107

00:46:15,110 --> 00:46:11,660

thank you for listening to the skeptic

1108

00:46:17,300 --> 00:46:15,120

zone on this hot and steamy Sydney day

1109

00:46:19,280 --> 00:46:17,310

coming up in the next few weeks even

1110

00:46:20,660 --> 00:46:19,290

more from Mad Maynard and some great

1111

00:46:22,940 --> 00:46:20,670

interviews from the Australian skeptics

1112

00:46:25,520 --> 00:46:22,950

National Convention yes folks there

1113

00:46:26,990 --> 00:46:25,530

never ending which is a good thing also

1114

00:46:29,360 --> 00:46:27,000

I'm going to catch up to a dear friend

1115

00:46:33,140 --> 00:46:29,370

of mine susan go back from the guerrilla

1116

00:46:35,240 --> 00:46:33,150

skepticism program or outreach or

1117

00:46:38,090 --> 00:46:35,250

initiative that should be very

1118

00:46:39,980 --> 00:46:38,100

interesting but for this week this is

1119

00:46:45,860 --> 00:46:39,990

Richard Saunderson Fred the cat say

1120

00:46:47,330 --> 00:46:45,870

hello Fred mmm that's about as much as

1121

00:46:54,050 --> 00:46:47,340

we're going to get out of him signing

1122

00:46:57,440 --> 00:46:54,060

off from Sydney Australia you've been

1123

00:47:01,850 --> 00:46:57,450

listening to the skeptic zone visit her

1124

00:47:04,340 --> 00:47:01,860

website at www.skeptics.org on TV for