

**SKEPTIC  
ZONE**



THINKING CAPS  
MUST BE WORN  
IN THIS AREA

The  
Podcast  
from  
Australia  
for  
Science  
and  
Reason

[www.skepticzone.tv](http://www.skepticzone.tv)

1  
00:00:12,970 --> 00:00:09,470  
welcome to the skeptic zone the podcast

2  
00:00:16,790 --> 00:00:12,980  
from Australia for science and reason

3  
00:00:20,790 --> 00:00:16,800  
yuria hosts Richard Saunders and Stefan

4  
00:00:27,010 --> 00:00:23,740  
Richard good morning afternoon evening

5  
00:00:28,630 --> 00:00:27,020  
morning everything's going Richard I am

6  
00:00:31,990 --> 00:00:28,640  
looking at a screen right now my

7  
00:00:34,570 --> 00:00:32,000  
computer of itunes yes yes itunes yes

8  
00:00:36,850 --> 00:00:34,580  
into the podcast section oh yes the

9  
00:00:39,130 --> 00:00:36,860  
audio podcast section is yes the audio

10  
00:00:42,400 --> 00:00:39,140  
science podcast sickness gets better and

11  
00:00:46,150 --> 00:00:42,410  
we number one number one our number one

12  
00:00:48,160 --> 00:00:46,160  
science podcast in Australian just in

13  
00:00:49,780 --> 00:00:48,170

time for Christmas I love it oh it's why

14

00:00:52,330 --> 00:00:49,790

they've had some fanfare music I play it

15

00:00:53,950 --> 00:00:52,340

right now it sits in my head I'll put

16

00:00:57,009 --> 00:00:53,960

some in in the mix like hear that music

17

00:00:59,200 --> 00:00:57,019

now ah that's glorious or musical is

18

00:01:00,399 --> 00:00:59,210

good well Richard is great to be back in

19

00:01:02,020 --> 00:01:00,409

here we are the number one science

20

00:01:04,930 --> 00:01:02,030

podcast in Australia and and their

21

00:01:06,250 --> 00:01:04,940

booming and booming analytica thank you

22

00:01:08,260 --> 00:01:06,260

listeners for subscribing and

23

00:01:10,750 --> 00:01:08,270

downloading and if you enjoy the show

24

00:01:12,280 --> 00:01:10,760

please go back and download all the

25

00:01:13,960 --> 00:01:12,290

episodes you might not have heard yet

26

00:01:16,330 --> 00:01:13,970

yeah and even you can go back to that

27

00:01:18,340 --> 00:01:16,340

the old tank days too that's right now

28

00:01:19,690 --> 00:01:18,350

I'll show before this one the skeptic

29

00:01:21,550 --> 00:01:19,700

tank which was a lot of fun and the tank

30

00:01:23,200 --> 00:01:21,560

vodcast lots of good stuff good stuff

31

00:01:25,359 --> 00:01:23,210

there so yeah thanks for everyone for

32

00:01:27,010 --> 00:01:25,369

joining us and for participating this

33

00:01:29,289 --> 00:01:27,020

wonderful little experiment of the

34

00:01:31,599 --> 00:01:29,299

skeptic come zone the skeptics own

35

00:01:34,300 --> 00:01:31,609

podcast now this is showed number nine

36

00:01:35,950 --> 00:01:34,310

already for the 19th of December

37

00:01:38,740 --> 00:01:35,960

goodness me we're plowing through them

38

00:01:40,929 --> 00:01:38,750

yeah so what are we going up what a

39

00:01:42,910 --> 00:01:40,939

lineup we have for you we have an

40

00:01:45,370 --> 00:01:42,920

interview with dr. Pamela gay from

41

00:01:48,580 --> 00:01:45,380

astronomy cast calm oh that's a great

42

00:01:50,980 --> 00:01:48,590

site that's a great site last absolutely

43

00:01:52,840 --> 00:01:50,990

yeah and she that they're like a really

44

00:01:54,489 --> 00:01:52,850

got some really Zhaan they're really

45

00:01:56,169 --> 00:01:54,499

good stories really popular and you can

46

00:01:57,940 --> 00:01:56,179

hear all about that i'm sure a lot of

47

00:01:59,469 --> 00:01:57,950

our listeners already know about Pamela

48

00:02:01,690 --> 00:01:59,479

gay and her pod can you think so because

49

00:02:03,789 --> 00:02:01,700

I would think so huge so and what else

50

00:02:05,590 --> 00:02:03,799

and we've got it just for a change it's

51  
00:02:07,749 --> 00:02:05,600  
a very interesting thing I went down to

52  
00:02:09,820 --> 00:02:07,759  
the town hall here in Sydney where they

53  
00:02:13,420 --> 00:02:09,830  
had a protest against internet

54  
00:02:14,800 --> 00:02:13,430  
censorship oh I source of news about

55  
00:02:17,440 --> 00:02:14,810  
that and I spoke to a lot of people

56  
00:02:20,559 --> 00:02:17,450  
including Fiona Patten from the

57  
00:02:22,300 --> 00:02:20,569  
Australian sex party the sex parties

58  
00:02:24,100 --> 00:02:22,310  
party that sounds good it's actually a

59  
00:02:25,990 --> 00:02:24,110  
political party it's not it's not a

60  
00:02:29,259 --> 00:02:26,000  
party amuse drink champagne everything

61  
00:02:30,880 --> 00:02:29,269  
probably you do ok so that's they've

62  
00:02:32,500 --> 00:02:30,890  
formed a new party too yeah fight all

63  
00:02:34,150 --> 00:02:32,510

the censorship that's right that's right

64

00:02:36,130 --> 00:02:34,160

so i'll be talking to her and some

65

00:02:38,080 --> 00:02:36,140

people down there d at the town hall

66

00:02:39,400 --> 00:02:38,090

consuming I'll be pretty excited that

67

00:02:41,290 --> 00:02:39,410

was pretty interesting and then we've

68

00:02:45,220 --> 00:02:41,300

got a really great interview with a guy

69

00:02:47,020 --> 00:02:45,230

only known as potholer 54 hot holla 54

70

00:02:49,270 --> 00:02:47,030

actually know about it i watch all these

71

00:02:51,120 --> 00:02:49,280

videos yeah yeah really cool yeah he

72

00:02:53,470 --> 00:02:51,130

does some great arguments on on

73

00:02:56,320 --> 00:02:53,480

creationism vs. science yeah and

74

00:02:58,570 --> 00:02:56,330

evolution vs. yes you know instant yeah

75

00:03:01,480 --> 00:02:58,580

it's instant University of magic and

76  
00:03:03,730 --> 00:03:01,490  
stuff now he has a new DVD out which you

77  
00:03:05,410 --> 00:03:03,740  
can download for free off the internet

78  
00:03:06,790 --> 00:03:05,420  
and details are coming up in that

79  
00:03:08,410 --> 00:03:06,800  
interview I'm actually in the middle of

80  
00:03:11,290 --> 00:03:08,420  
downloading it right now I should have

81  
00:03:13,240 --> 00:03:11,300  
brought you a copy i downloaded i will

82  
00:03:14,680 --> 00:03:13,250  
thus a lot of bandwidth i just

83  
00:03:16,840 --> 00:03:14,690  
remembered i brought you a copy on my

84  
00:03:18,310 --> 00:03:16,850  
USB stick Oh Richard Richard really you

85  
00:03:20,740 --> 00:03:18,320  
go what a what a glorious day it is

86  
00:03:23,410 --> 00:03:20,750  
today 10 science and i get x pothole or

87  
00:03:24,520 --> 00:03:23,420  
dvd you do on a USB stick I suppose we

88  
00:03:25,810 --> 00:03:24,530

should get into it shortly but we've

89

00:03:27,790 --> 00:03:25,820

still had a couple more things coming up

90

00:03:29,830 --> 00:03:27,800

we do don't forget we've got our regular

91

00:03:32,260 --> 00:03:29,840

segments to round up with Michael while

92

00:03:34,930 --> 00:03:32,270

hand dr. Rachel reports and our

93

00:03:36,130 --> 00:03:34,940

Christmas think tank oh that Christmas

94

00:03:38,050 --> 00:03:36,140

thing the coast miss think tank now

95

00:03:39,880 --> 00:03:38,060

listen is to keep us number one there

96

00:03:42,250 --> 00:03:39,890

are a few things you can do please tell

97

00:03:44,440 --> 00:03:42,260

your friends yeah about our show the

98

00:03:45,970 --> 00:03:44,450

skeptic zone tell your enemies too yeah

99

00:03:47,320 --> 00:03:45,980

tell you oh yes we've got lots more

100

00:03:49,090 --> 00:03:47,330

people coming into the zone that

101

00:03:50,920 --> 00:03:49,100

wouldn't normally listen to a show like

102

00:03:53,650 --> 00:03:50,930

this because we would actually have some

103

00:03:55,990 --> 00:03:53,660

fun with them and get them to maybe yeah

104

00:03:58,780 --> 00:03:56,000

change them on tomato so also on our

105

00:04:00,850 --> 00:03:58,790

website you can download some PDF flyers

106

00:04:02,710 --> 00:04:00,860

and post them up at your university or

107

00:04:04,210 --> 00:04:02,720

college oh yeah or shopping so that's

108

00:04:07,240 --> 00:04:04,220

right get into the zone or in your own

109

00:04:09,100 --> 00:04:07,250

bathroom or anywhere you want awesome

110

00:04:15,040 --> 00:04:09,110

okay so uh let's get stuck into it I

111

00:04:26,500 --> 00:04:24,220

a lifetime stargazer dr. Pamela L gay

112

00:04:29,680 --> 00:04:26,510

has followed her obsession to a

113

00:04:31,780 --> 00:04:29,690

profession today dr. gays an associate

114

00:04:33,040 --> 00:04:31,790

research professor of physics at

115

00:04:35,460 --> 00:04:33,050

southern illinois university

116

00:04:37,570 --> 00:04:35,470

edwardsville where she teaches

117

00:04:40,810 --> 00:04:37,580

introductory physics and astronomy

118

00:04:43,420 --> 00:04:40,820

courses she also produces the popular

119

00:04:45,940 --> 00:04:43,430

science podcast astronomy cast with

120

00:04:47,680 --> 00:04:45,950

Fraser Cain each week they take their

121

00:04:50,650 --> 00:04:47,690

international audience on an educational

122

00:04:52,600 --> 00:04:50,660

journey through the cosmos as a

123

00:04:55,240 --> 00:04:52,610

professional astronomer Pamela's

124

00:04:58,770 --> 00:04:55,250

research focuses on variable stars

125

00:05:01,360 --> 00:04:58,780

galaxies evolution and public outreach

126  
00:05:04,090 --> 00:05:01,370  
teaching by the day she works on

127  
00:05:06,910 --> 00:05:04,100  
astronomy data by night teaming up with

128  
00:05:09,610 --> 00:05:06,920  
citizen scientists to find new ways of

129  
00:05:11,410 --> 00:05:09,620  
understanding our universe in between

130  
00:05:13,440 --> 00:05:11,420  
she finds times to mentor students

131  
00:05:16,420 --> 00:05:13,450  
working on observational astronomy

132  
00:05:19,930 --> 00:05:16,430  
projects through Swinburne astronomy

133  
00:05:21,909 --> 00:05:19,940  
online podcasting is a creative outlet

134  
00:05:24,270 --> 00:05:21,919  
that brings together her love of

135  
00:05:26,860 --> 00:05:24,280  
astronomy with her passion for teaching

136  
00:05:29,950 --> 00:05:26,870  
making staying current in an

137  
00:05:34,330 --> 00:05:29,960  
ever-changing field of fun endeavor you

138  
00:05:40,120 --> 00:05:34,340

can find her online at WWE strana me

139

00:05:44,980 --> 00:05:40,130

cast calm and at ww start Strider calm

140

00:05:47,770 --> 00:05:44,990

and joining me on the line is Pamela gay

141

00:05:50,080 --> 00:05:47,780

hello Pamela hi Richard how are you

142

00:05:51,820 --> 00:05:50,090

doing I'm doing really well I'm doing

143

00:05:53,920 --> 00:05:51,830

particularly well because I'm so happy

144

00:05:56,230 --> 00:05:53,930

to talk with you it seems a long time

145

00:06:00,250 --> 00:05:56,240

since we've actually have seen each

146

00:06:02,590 --> 00:06:00,260

other at dragoncon of course oh that was

147

00:06:04,870 --> 00:06:02,600

only three months ago but sometimes it

148

00:06:06,850 --> 00:06:04,880

feels like a lifetime ago it was

149

00:06:09,700 --> 00:06:06,860

tremendous fun I can't wait to go back

150

00:06:12,220 --> 00:06:09,710

there next year I really must ask you

151  
00:06:15,570 --> 00:06:12,230  
straight away what is it about astronomy

152  
00:06:18,100 --> 00:06:15,580  
that that it engages you so much well

153  
00:06:21,610 --> 00:06:18,110  
here on our planet Earth we're sort of

154  
00:06:24,640 --> 00:06:21,620  
confined by what we're able to build

155  
00:06:26,590 --> 00:06:24,650  
what we're able to do and a plan it's

156  
00:06:28,640 --> 00:06:26,600  
only so big you can have only so many

157  
00:06:30,860 --> 00:06:28,650  
different combinations of things

158  
00:06:35,629 --> 00:06:30,870  
but as we look out across the universe

159  
00:06:37,550 --> 00:06:35,639  
we are allowed to look across 15 billion

160  
00:06:40,930 --> 00:06:37,560  
you twelve thirteen point seven plus or

161  
00:06:43,520 --> 00:06:40,940  
minus point two billion years of history

162  
00:06:44,990 --> 00:06:43,530  
instead of just the five billion that

163  
00:06:49,219 --> 00:06:45,000

were confined to here on the planet

164

00:06:51,279 --> 00:06:49,229

Earth we can look out across billions of

165

00:06:54,140 --> 00:06:51,289

light-years of space and see all the

166

00:06:56,420 --> 00:06:54,150

galaxies and everything within them

167

00:06:58,969 --> 00:06:56,430

across all those billions of light-years

168

00:07:01,580 --> 00:06:58,979

of space instead of just what's stuck on

169

00:07:05,210 --> 00:07:01,590

the surface of the planet Earth and as

170

00:07:07,700 --> 00:07:05,220

we look across this amazing volume the

171

00:07:10,189 --> 00:07:07,710

diversity of things that are waiting to

172

00:07:11,629 --> 00:07:10,199

be discovered is something we can't even

173

00:07:13,310 --> 00:07:11,639

wrap our heads around we're still

174

00:07:15,950 --> 00:07:13,320

finding new things that we've never even

175

00:07:18,590 --> 00:07:15,960

imagined and we've been kind of looking

176

00:07:20,540 --> 00:07:18,600

up for well as long as human beings of

177

00:07:22,520 --> 00:07:20,550

existence there's always something new

178

00:07:26,060 --> 00:07:22,530

to find always something new to learn

179

00:07:28,219 --> 00:07:26,070

always something new to go wait this

180

00:07:31,610 --> 00:07:28,229

over here does this this over here does

181

00:07:33,589 --> 00:07:31,620

this these are related we're still

182

00:07:34,939 --> 00:07:33,599

building and understanding and I love

183

00:07:37,430 --> 00:07:34,949

being part of this process of

184

00:07:40,010 --> 00:07:37,440

understanding how our universe is

185

00:07:44,409 --> 00:07:40,020

changing over billions of years of time

186

00:07:47,089 --> 00:07:44,419

and what since you've been involved in

187

00:07:50,360 --> 00:07:47,099

practicing astronomy what is what what

188

00:07:52,010 --> 00:07:50,370

is one of the most startling changes in

189

00:07:55,700 --> 00:07:52,020

our way of thinking that that has

190

00:07:57,320 --> 00:07:55,710

occurred dark energy it's it's starting

191

00:07:59,089 --> 00:07:57,330

to sound cliché cuz i think that's the

192

00:08:02,320 --> 00:07:59,099

answer pretty much every astronomer is

193

00:08:04,460 --> 00:08:02,330

going to give but back in 1998

194

00:08:06,800 --> 00:08:04,470

everything we thought we knew about the

195

00:08:10,040 --> 00:08:06,810

universe got tossed out the window in

196

00:08:13,850 --> 00:08:10,050

one or actually two wonderful sets of

197

00:08:17,810 --> 00:08:13,860

data we'd always had this picture of the

198

00:08:20,719 --> 00:08:17,820

universe is this expanding thing that

199

00:08:22,520 --> 00:08:20,729

due to its own gravity would perhaps

200

00:08:25,640 --> 00:08:22,530

eventually stop perhaps eventually

201  
00:08:29,029 --> 00:08:25,650  
crunch in on itself maybe kind of keep

202  
00:08:30,830 --> 00:08:29,039  
going forever but we never imagined it

203  
00:08:33,050 --> 00:08:30,840  
would be accelerating itself apart which

204  
00:08:35,120 --> 00:08:33,060  
turns out to be the actual physics of

205  
00:08:37,370 --> 00:08:35,130  
the universe we live in and we're not

206  
00:08:40,579 --> 00:08:37,380  
sure what's due in the bushing we've

207  
00:08:42,380 --> 00:08:40,589  
given this strange energy that seems to

208  
00:08:42,649 --> 00:08:42,390  
be accelerating our universe apart the

209  
00:08:45,350 --> 00:08:42,659  
name

210  
00:08:49,369 --> 00:08:45,360  
dark energy but we have no clue what it

211  
00:08:51,019 --> 00:08:49,379  
is and just to have everything we

212  
00:08:53,329 --> 00:08:51,029  
thought we knew about how the universe

213  
00:08:56,900 --> 00:08:53,339

is going to evolve into the future gets

214

00:08:58,999 --> 00:08:56,910

thrown out in one year that's that's

215

00:09:01,009 --> 00:08:59,009

pretty amazing now that's one of the

216

00:09:04,670 --> 00:09:01,019

things I really love about science is

217

00:09:07,519 --> 00:09:04,680

science is willing to basically throw

218

00:09:09,949 --> 00:09:07,529

things out I mean it's it's incredible

219

00:09:11,600 --> 00:09:09,959

because of course from the skeptical

220

00:09:15,259 --> 00:09:11,610

point of view one of the groups of

221

00:09:17,240 --> 00:09:15,269

people we there i say battle with to my

222

00:09:20,660 --> 00:09:17,250

mind people who belittle the universe

223

00:09:23,960 --> 00:09:20,670

and these are the astrologers who who

224

00:09:26,600 --> 00:09:23,970

can't bear the thought that they might

225

00:09:27,860 --> 00:09:26,610

be wrong and they won't throw things out

226

00:09:32,210 --> 00:09:27,870

there for they're stuck with the same

227

00:09:33,769 --> 00:09:32,220

old outdated claptrap they have been for

228

00:09:36,470 --> 00:09:33,779

years and years and years do you get

229

00:09:39,100 --> 00:09:36,480

many of your students asking you these

230

00:09:41,300 --> 00:09:39,110

sort of questions what about astrology

231

00:09:42,559 --> 00:09:41,310

what really gets me is when I have

232

00:09:44,689 --> 00:09:42,569

students come up and they're like I

233

00:09:47,780 --> 00:09:44,699

really need to learn astronomy so that I

234

00:09:50,660 --> 00:09:47,790

can work out fortune for this chart for

235

00:09:52,730 --> 00:09:50,670

that it's like oh oh oh dear I I will

236

00:09:54,590 --> 00:09:52,740

teach you the physics but um hopefully

237

00:09:56,150 --> 00:09:54,600

when I'm done you will no longer feet

238

00:10:00,650 --> 00:09:56,160

feel the need to create a chart for

239

00:10:04,280 --> 00:10:00,660

anything that surprises me yeah well it

240

00:10:07,069 --> 00:10:04,290

happens and it's part of we each grew up

241

00:10:10,850 --> 00:10:07,079

with in a small culture that may not

242

00:10:12,920 --> 00:10:10,860

expose us to science and you can't

243

00:10:13,790 --> 00:10:12,930

really blame a student for believing in

244

00:10:15,889 --> 00:10:13,800

something when they've never been

245

00:10:17,449 --> 00:10:15,899

presented with an alternative when

246

00:10:20,449 --> 00:10:17,459

they've never been presented with the

247

00:10:23,480 --> 00:10:20,459

science the facts of how our universe

248

00:10:25,819 --> 00:10:23,490

functions the physics of well what

249

00:10:28,579 --> 00:10:25,829

actually is a force what actually does

250

00:10:32,900 --> 00:10:28,589

create a physical measurable influence

251  
00:10:35,780 --> 00:10:32,910  
on anything and so the best way to take

252  
00:10:38,629 --> 00:10:35,790  
these poor misguided souls and put them

253  
00:10:41,210 --> 00:10:38,639  
on the path of well skeptical reasoning

254  
00:10:45,889 --> 00:10:41,220  
is to get them to work out the math of

255  
00:10:48,829 --> 00:10:45,899  
okay so exactly how much influence can

256  
00:10:50,840 --> 00:10:48,839  
Jupiter have on a human being how much

257  
00:10:53,210 --> 00:10:50,850  
influence can a star have on a human

258  
00:10:55,249 --> 00:10:53,220  
being work out what is the light we're

259  
00:10:56,480 --> 00:10:55,259  
receiving work out what is the gravity

260  
00:10:58,490 --> 00:10:56,490  
that we're being influenced

261  
00:11:01,160 --> 00:10:58,500  
I and then compare it to like a semi

262  
00:11:02,990 --> 00:11:01,170  
truck driving down the street hmm and

263  
00:11:06,199 --> 00:11:03,000

it's in making these everyday

264

00:11:08,600 --> 00:11:06,209

comparisons that you realize well maybe

265

00:11:10,639 --> 00:11:08,610

I need to take into account all the

266

00:11:13,460 --> 00:11:10,649

long-haul truck drivers on the planet as

267

00:11:14,930 --> 00:11:13,470

well in working out my charts and that's

268

00:11:17,210 --> 00:11:14,940

where you start to realize maybe this

269

00:11:20,150 --> 00:11:17,220

isn't something that you can believe in

270

00:11:22,850 --> 00:11:20,160

that's hilarious I mean it's it's one of

271

00:11:24,889 --> 00:11:22,860

the old favorites you know the skeptics

272

00:11:28,100 --> 00:11:24,899

I always have to be you're supposed to

273

00:11:30,680 --> 00:11:28,110

be skeptical of astrology but sort of

274

00:11:33,650 --> 00:11:30,690

like shooting fish in a barrel really to

275

00:11:35,510 --> 00:11:33,660

be skeptical astrology one of the best

276

00:11:38,930 --> 00:11:35,520

practical jokes I think I've ever heard

277

00:11:42,400 --> 00:11:38,940

is one of the faculty who I shan't name

278

00:11:44,570 --> 00:11:42,410

at the University of Texas called up a

279

00:11:47,329 --> 00:11:44,580

exoplanet astronomer someone who studies

280

00:11:49,310 --> 00:11:47,339

planets around other stars demanding to

281

00:11:52,730 --> 00:11:49,320

know the locations of planets orbiting

282

00:11:55,460 --> 00:11:52,740

other stars to work out the astrological

283

00:11:57,980 --> 00:11:55,470

charts for their children's wedding it

284

00:12:00,199 --> 00:11:57,990

was completely a practical joke but when

285

00:12:02,120 --> 00:12:00,209

you start thinking about all the motions

286

00:12:04,280 --> 00:12:02,130

all the objects and then start trying to

287

00:12:08,750 --> 00:12:04,290

understand all the things that we

288

00:12:10,790 --> 00:12:08,760

haven't even detected yet yeah it's it's

289

00:12:12,319 --> 00:12:10,800

Turtles all the way down and about as

290

00:12:14,240 --> 00:12:12,329

believable as turtles all the way down

291

00:12:16,550 --> 00:12:14,250

Oh Pamela I think you've given me in

292

00:12:19,370 --> 00:12:16,560

half I'll listen is an evil idea to set

293

00:12:23,319 --> 00:12:19,380

up a new form of astrology exoplanet

294

00:12:25,880 --> 00:12:23,329

astrology the astrology of the future

295

00:12:29,569 --> 00:12:25,890

well you know if we're gonna settle

296

00:12:32,630 --> 00:12:29,579

alien worlds how many exoplanets have

297

00:12:34,880 --> 00:12:32,640

been discovered to your knowledge I last

298

00:12:36,290 --> 00:12:34,890

I looked we're up well over 200 well

299

00:12:38,480 --> 00:12:36,300

there you go i mean there's bound to be

300

00:12:40,370 --> 00:12:38,490

lots of influences and conjunctions in

301  
00:12:42,590 --> 00:12:40,380  
the third house of the six meridian of

302  
00:12:44,660 --> 00:12:42,600  
the second coming of age right and

303  
00:12:47,329 --> 00:12:44,670  
there's brown dwarf stars and there's

304  
00:12:48,949 --> 00:12:47,339  
red dwarf stars and all these objects

305  
00:12:52,040 --> 00:12:48,959  
that aren't necessarily all that far

306  
00:12:54,620 --> 00:12:52,050  
away and you know at a certain point you

307  
00:12:58,250 --> 00:12:54,630  
just have to go yeah there's other

308  
00:13:02,120 --> 00:12:58,260  
things on my planet who have a much

309  
00:13:03,590 --> 00:13:02,130  
greater effect and we don't care so why

310  
00:13:05,930 --> 00:13:03,600  
are we carrying about these celestial

311  
00:13:07,699 --> 00:13:05,940  
objects where's the magic that's right

312  
00:13:09,950 --> 00:13:07,709  
but I one of the things that we

313  
00:13:12,650 --> 00:13:09,960

encounter many times it's

314

00:13:16,000 --> 00:13:12,660

part of our culture at least to grow up

315

00:13:19,280 --> 00:13:16,010

with the Stars what's your star sign and

316

00:13:21,980 --> 00:13:19,290

unless people spend the time in the

317

00:13:24,920 --> 00:13:21,990

effort to to question it or think about

318

00:13:27,140 --> 00:13:24,930

it a lot of times they'll go through

319

00:13:28,790 --> 00:13:27,150

their whole lives just assuming that is

320

00:13:30,800 --> 00:13:28,800

a part of the way that the universe

321

00:13:33,170 --> 00:13:30,810

works that people have star signs and it

322

00:13:35,890 --> 00:13:33,180

works this way or that way and what you

323

00:13:40,700 --> 00:13:35,900

have to start asking is if this is true

324

00:13:43,880 --> 00:13:40,710

why is it that only a certain section of

325

00:13:47,330 --> 00:13:43,890

the people get affected by cholera

326

00:13:48,860 --> 00:13:47,340

outbreaks get affected by tsunamis it's

327

00:13:51,890 --> 00:13:48,870

not only the people that are being

328

00:13:54,860 --> 00:13:51,900

affected by these natural disasters who

329

00:13:58,520 --> 00:13:54,870

have the same star signs you can have

330

00:14:02,600 --> 00:13:58,530

two twins that were born via cesarean

331

00:14:05,200 --> 00:14:02,610

section only moments apart and things in

332

00:14:08,240 --> 00:14:05,210

the universe aren't moving that fast and

333

00:14:11,570 --> 00:14:08,250

yet they'll undergo radically different

334

00:14:13,430 --> 00:14:11,580

lives yeah so if it's your star signs

335

00:14:16,990 --> 00:14:13,440

that matter how is it that you can have

336

00:14:19,340 --> 00:14:17,000

two people who grow up side-by-side

337

00:14:22,490 --> 00:14:19,350

conjoined twins how the heck can

338

00:14:24,260 --> 00:14:22,500

conjoined twins have different days one

339

00:14:26,720 --> 00:14:24,270

might get a crappy email in another one

340

00:14:28,280 --> 00:14:26,730

gets a really good email and yet what

341

00:14:30,530 --> 00:14:28,290

difference have these conjoined twins

342

00:14:32,870 --> 00:14:30,540

really experienced well the astrologers

343

00:14:36,740 --> 00:14:32,880

I've met out there will always have an

344

00:14:38,810 --> 00:14:36,750

answer the lamest answer we get from

345

00:14:40,910 --> 00:14:38,820

people who believe in magical thinking

346

00:14:42,380 --> 00:14:40,920

like astrology or psychics or something

347

00:14:43,790 --> 00:14:42,390

like that is when you put a question to

348

00:14:46,280 --> 00:14:43,800

them like that they'll say oh it doesn't

349

00:14:50,330 --> 00:14:46,290

work that way and this is where I say

350

00:14:52,940 --> 00:14:50,340

what physics and I say okay so take us

351

00:14:54,500 --> 00:14:52,950

on my truck fill it up with refrigerator

352

00:14:57,620 --> 00:14:54,510

magnets that are all oriented in the

353

00:14:59,530 --> 00:14:57,630

same direction and stand in front of it

354

00:15:01,850 --> 00:14:59,540

while its headlights shine on you and

355

00:15:04,130 --> 00:15:01,860

there you have the magnetic field you

356

00:15:06,200 --> 00:15:04,140

have the light you have the gravity and

357

00:15:10,310 --> 00:15:06,210

compare the effects that you're getting

358

00:15:11,750 --> 00:15:10,320

from this random truck to Jupiter I see

359

00:15:15,950 --> 00:15:11,760

Pamela you don't understand its

360

00:15:20,120 --> 00:15:15,960

spiritual energy yeah yeah like I said

361

00:15:22,820 --> 00:15:20,130

shooting fish in a barrel but it does

362

00:15:23,600 --> 00:15:22,830

that's interesting just going back to

363

00:15:25,240 --> 00:15:23,610

something you

364

00:15:28,850 --> 00:15:25,250

earlier about the fate of the universe

365

00:15:30,769 --> 00:15:28,860

when I was telling the other members of

366

00:15:33,530 --> 00:15:30,779

the skeptics own podcast that I'd be

367

00:15:35,810 --> 00:15:33,540

interviewing you our young astronomy

368

00:15:38,780 --> 00:15:35,820

student Tiffany day sent me an email

369

00:15:40,460 --> 00:15:38,790

saying can you please ask pamela in her

370

00:15:42,410 --> 00:15:40,470

opinion according to our current

371

00:15:46,340 --> 00:15:42,420

knowledge what she thinks the ultimate

372

00:15:48,889 --> 00:15:46,350

fate of our universe will be 0 our

373

00:15:51,530 --> 00:15:48,899

universe has such a sad fate in front of

374

00:15:56,019 --> 00:15:51,540

it oh it's it's gonna actually tear

375

00:15:57,980 --> 00:15:56,029

itself apart oh so over time our

376

00:16:01,160 --> 00:15:57,990

universe it's going to just keep

377

00:16:04,069 --> 00:16:01,170

expanding keep expanding forever and as

378

00:16:07,009 --> 00:16:04,079

it does this it's it's going to reach

379

00:16:09,110 --> 00:16:07,019

the point where well we don't think

380

00:16:11,720 --> 00:16:09,120

protons are stable the stuff that makes

381

00:16:14,660 --> 00:16:11,730

up hydrogen atoms there's a proton and

382

00:16:15,920 --> 00:16:14,670

electron in most hydrogen atoms and so

383

00:16:18,560 --> 00:16:15,930

there's going to be some day in the

384

00:16:21,319 --> 00:16:18,570

future where even the stuff that stars

385

00:16:26,090 --> 00:16:21,329

are made of stars to fall apart into

386

00:16:28,310 --> 00:16:26,100

pure energy and so as we have even white

387

00:16:30,500 --> 00:16:28,320

dwarf stars evaporating away as the

388

00:16:32,780 --> 00:16:30,510

protons decay as we have black holes

389

00:16:35,389 --> 00:16:32,790

evaporating away as black holes do via

390

00:16:38,930 --> 00:16:35,399

Hawking radiation we're going to end up

391

00:16:42,139 --> 00:16:38,940

with this soup of energy in a universe

392

00:16:45,920 --> 00:16:42,149

that's expanding such that that energy

393

00:16:47,720 --> 00:16:45,930

gets spread out so much that a firefly

394

00:16:50,389 --> 00:16:47,730

would be the most energetic thing in the

395

00:16:52,340 --> 00:16:50,399

entire universe by orders of magnitude

396

00:16:54,500 --> 00:16:52,350

what happens that's not very happy news

397

00:16:57,560 --> 00:16:54,510

because she's just got two new kittens

398

00:16:59,210 --> 00:16:57,570

so well we have really interviewers to

399

00:17:01,040 --> 00:16:59,220

worry about this so I think we're okay

400

00:17:02,990 --> 00:17:01,050

trillions of all that makes me feel a

401  
00:17:06,260 --> 00:17:03,000  
lot better can you please tell us a

402  
00:17:08,780 --> 00:17:06,270  
little bit about the very interesting

403  
00:17:13,189 --> 00:17:08,790  
and very popular podcast you're involved

404  
00:17:15,740 --> 00:17:13,199  
with called astronomy cast astronomy

405  
00:17:17,480 --> 00:17:15,750  
cast is a twice-weekly show that I put

406  
00:17:20,510 --> 00:17:17,490  
on with Fraser Cain of Universe Today

407  
00:17:22,819 --> 00:17:20,520  
and our first weekly show we take on a

408  
00:17:26,179 --> 00:17:22,829  
different topic each week anything from

409  
00:17:28,159 --> 00:17:26,189  
wise Pluto not a planet to well what is

410  
00:17:30,470 --> 00:17:28,169  
this relativity stuff that you might

411  
00:17:31,669 --> 00:17:30,480  
have heard about we take our listeners

412  
00:17:33,980 --> 00:17:31,679  
on a fact space journey through the

413  
00:17:35,769 --> 00:17:33,990

cosmos try and help them understand not

414

00:17:37,180 --> 00:17:35,779

just what we know but why

415

00:17:39,129 --> 00:17:37,190

we know the things we know looking at

416

00:17:41,919 --> 00:17:39,139

the story looking at the data looking at

417

00:17:45,639 --> 00:17:41,929

well what are the facts that allow us to

418

00:17:47,589 --> 00:17:45,649

understand the universe and we realize

419

00:17:50,379 --> 00:17:47,599

that some of our shows cause more

420

00:17:53,109 --> 00:17:50,389

questions than they answer so our second

421

00:17:54,909 --> 00:17:53,119

show each week which admittedly when one

422

00:17:57,249 --> 00:17:54,919

of us sick or traveling may not happen

423

00:17:59,919 --> 00:17:57,259

but our second show most weeks is a

424

00:18:02,859 --> 00:17:59,929

listener questions show where we work to

425

00:18:04,180 --> 00:18:02,869

answer the questions that you or anyone

426

00:18:06,249 --> 00:18:04,190

else who listens to our show might

427

00:18:08,019 --> 00:18:06,259

happen to send in to us well you must

428

00:18:09,159 --> 00:18:08,029

get some very interesting questions

429

00:18:10,719 --> 00:18:09,169

because I know for a fact there are

430

00:18:12,039 --> 00:18:10,729

astronomy students who listen to your

431

00:18:13,959 --> 00:18:12,049

show and I'm sure they do from all

432

00:18:17,079 --> 00:18:13,969

around the world so the questions you

433

00:18:20,109 --> 00:18:17,089

must get are you ever stumped by these

434

00:18:23,289 --> 00:18:20,119

girls there have been some questions

435

00:18:25,479 --> 00:18:23,299

that they're harder than anything I ever

436

00:18:27,549 --> 00:18:25,489

encountered on an exam in graduate

437

00:18:28,959 --> 00:18:27,559

school and I have to admit I've given

438

00:18:30,479 --> 00:18:28,969

false information and had to do

439

00:18:34,359 --> 00:18:30,489

Corrections a couple of different times

440

00:18:36,369 --> 00:18:34,369

no people out there listen to what we

441

00:18:38,409 --> 00:18:36,379

have to say and then ponder it and come

442

00:18:43,180 --> 00:18:38,419

back with the most amazing well what if

443

00:18:45,129 --> 00:18:43,190

well I read can you explain and it keeps

444

00:18:46,749 --> 00:18:45,139

me on my feet every week and that's one

445

00:18:48,459 --> 00:18:46,759

of the great things about podcasting is

446

00:18:50,680 --> 00:18:48,469

it's a constant excuse to learn

447

00:18:52,690 --> 00:18:50,690

something new it's absolutely true and I

448

00:18:55,239 --> 00:18:52,700

speak from experience I enjoyed a very

449

00:18:57,519 --> 00:18:55,249

recent episode of astronomy cast where

450

00:18:59,499 --> 00:18:57,529

you're talking about time and why is it

451  
00:19:02,680 --> 00:18:59,509  
flowing in one direction and not another

452  
00:19:05,529 --> 00:19:02,690  
direction and I'm sure I all around the

453  
00:19:07,719 --> 00:19:05,539  
world all these people like myself or

454  
00:19:10,119 --> 00:19:07,729  
astronomy students are sitting there or

455  
00:19:11,979 --> 00:19:10,129  
on the treadmill and their brains is

456  
00:19:13,919 --> 00:19:11,989  
just snapping and exploding listening to

457  
00:19:16,419 --> 00:19:13,929  
the stuff it's it's good stuff family

458  
00:19:18,039 --> 00:19:16,429  
well thank you it's it's something we

459  
00:19:19,839 --> 00:19:18,049  
have a lot of fun putting together and

460  
00:19:22,089 --> 00:19:19,849  
I'm glad you're out there listening and

461  
00:19:24,279 --> 00:19:22,099  
enjoying it certainly are and you also

462  
00:19:27,759 --> 00:19:24,289  
have a blog of course and where did the

463  
00:19:30,879 --> 00:19:27,769

name staffs try to come from alright so

464

00:19:36,039 --> 00:19:30,889

my blog star Strider calm and it comes

465

00:19:38,739 --> 00:19:36,049

from I there was a BBC radio series on

466

00:19:40,479 --> 00:19:38,749

the tokens Lord of the Rings and it

467

00:19:43,259 --> 00:19:40,489

refers to the character Aragorn a

468

00:19:45,339 --> 00:19:43,269

Strider throughout the entire series and

469

00:19:46,810 --> 00:19:45,349

driving back and forth and graduate

470

00:19:49,600 --> 00:19:46,820

school from mcdonald observatory i

471

00:19:52,480 --> 00:19:49,610

listened to the whole BBC Tolkien audio

472

00:19:56,280 --> 00:19:52,490

Oh Lord of the Rings series and decided

473

00:19:59,410 --> 00:19:56,290

to name my college computer Strider and

474

00:20:01,840 --> 00:19:59,420

in trying to come up with a name for my

475

00:20:04,030 --> 00:20:01,850

blog well it's it's a blog that talks

476

00:20:06,460 --> 00:20:04,040

about astronomy and academia so it

477

00:20:10,600 --> 00:20:06,470

became star Strider perfect that that's

478

00:20:12,340 --> 00:20:10,610

uh that's I never knew I never knew that

479

00:20:14,680 --> 00:20:12,350

you know no one's asking me that

480

00:20:16,900 --> 00:20:14,690

question before so cats out of the bag

481

00:20:20,560 --> 00:20:16,910

now the world knows and its stride with

482

00:20:22,720 --> 00:20:20,570

a why first for the the skeptic zone one

483

00:20:25,990 --> 00:20:22,730

of my early influences and one of the

484

00:20:27,789 --> 00:20:26,000

minute the people I credit with getting

485

00:20:30,280 --> 00:20:27,799

me going in this science and skepticism

486

00:20:32,799 --> 00:20:30,290

and what a fascinating world it is is

487

00:20:39,400 --> 00:20:32,809

the light Carl Sagan was he an influence

488

00:20:41,500 --> 00:20:39,410

on YouTube not as much um Carl Sagan I

489

00:20:43,240 --> 00:20:41,510

loved his fiction book contact it was

490

00:20:45,460 --> 00:20:43,250

the first book I really encountered that

491

00:20:47,650 --> 00:20:45,470

had a female role model as an astronomer

492

00:20:49,539 --> 00:20:47,660

in it but for me I think the biggest

493

00:20:52,000 --> 00:20:49,549

influence was actually Timothy Ferriss

494

00:20:55,330 --> 00:20:52,010

who isn't an astronomer but he's a

495

00:20:57,190 --> 00:20:55,340

really good science writer and back when

496

00:20:59,289 --> 00:20:57,200

I was in Middle School my uncle got me a

497

00:21:01,600 --> 00:20:59,299

copy of coming of age in the Milky Way

498

00:21:04,150 --> 00:21:01,610

which was just the coolest title for a

499

00:21:06,909 --> 00:21:04,160

book and I remember sitting the back

500

00:21:09,039 --> 00:21:06,919

seat of my parents car while driving off

501  
00:21:10,680 --> 00:21:09,049  
to summer camp or something I forget

502  
00:21:14,200 --> 00:21:10,690  
exactly where we were driving and just

503  
00:21:16,570 --> 00:21:14,210  
devouring the book and reading about the

504  
00:21:18,870 --> 00:21:16,580  
women at Harvard College observatory and

505  
00:21:21,280 --> 00:21:18,880  
their discoveries of variable stars and

506  
00:21:24,669 --> 00:21:21,290  
now what seems like several lifetimes

507  
00:21:26,950 --> 00:21:24,679  
later I'm a variable star observer now

508  
00:21:29,080 --> 00:21:26,960  
Pamela this year was very exciting for

509  
00:21:31,090 --> 00:21:29,090  
me I got to meet you for a start and I

510  
00:21:32,980 --> 00:21:31,100  
went to the states i went to dragoncon

511  
00:21:36,310 --> 00:21:32,990  
in the amazing meeting but when i met

512  
00:21:37,659 --> 00:21:36,320  
you at DragonCon one of the things that

513  
00:21:40,360 --> 00:21:37,669

struck me about you was you were

514

00:21:42,909 --> 00:21:40,370

lurching towards me with a pin in your

515

00:21:45,610 --> 00:21:42,919

hand which you stuck on me this was for

516

00:21:46,900 --> 00:21:45,620

thee and thank you for doing that this

517

00:21:48,640 --> 00:21:46,910

was for the international year of

518

00:21:50,620 --> 00:21:48,650

astronomy which is next year what can

519

00:21:52,240 --> 00:21:50,630

you tell us about that well the

520

00:21:55,110 --> 00:21:52,250

international year of astronomy and I

521

00:21:57,850 --> 00:21:55,120

did pin you with one of our us iya pins

522

00:22:00,490 --> 00:21:57,860

the international year of astronomy is

523

00:22:01,820 --> 00:22:00,500

an international celebration of the

524

00:22:04,730 --> 00:22:01,830

universe it's

525

00:22:06,950 --> 00:22:04,740

our chances professional astronomers and

526

00:22:10,370 --> 00:22:06,960

as astronomy communicators and amateur

527

00:22:12,259 --> 00:22:10,380

astronomers to reach out to everyone who

528

00:22:15,049 --> 00:22:12,269

might not have ever taken the time to

529

00:22:17,600 --> 00:22:15,059

look up and say hey look up let me share

530

00:22:20,720 --> 00:22:17,610

the cosmos with you let me tell you a

531

00:22:23,000 --> 00:22:20,730

little bit about the art the history the

532

00:22:25,490 --> 00:22:23,010

science all the different things that

533

00:22:28,820 --> 00:22:25,500

astronomy I was touched on in the past

534

00:22:31,430 --> 00:22:28,830

400 years since Galileo first started

535

00:22:34,070 --> 00:22:31,440

turning astronomy and astrophysics by

536

00:22:37,009 --> 00:22:34,080

pointing his telescope at the planets

537

00:22:39,019 --> 00:22:37,019

and the Sun it's it's a wonderful event

538

00:22:40,850 --> 00:22:39,029

it's being organized by the

539

00:22:43,399 --> 00:22:40,860

International Astronomical Union and

540

00:22:47,149 --> 00:22:43,409

it's supported by the United Nations and

541

00:22:49,039 --> 00:22:47,159

by UNESCO and there are currently teams

542

00:22:52,399 --> 00:22:49,049

of people around the world in almost

543

00:22:54,470 --> 00:22:52,409

every nation working to plan local

544

00:22:56,330 --> 00:22:54,480

events when one of the things that I'm

545

00:22:58,430 --> 00:22:56,340

working on through the international new

546

00:23:01,009 --> 00:22:58,440

media Task Group is we're going to be

547

00:23:03,500 --> 00:23:01,019

putting together a daily eight to ten

548

00:23:06,680 --> 00:23:03,510

minute podcast called the 365 days

549

00:23:09,560 --> 00:23:06,690

astronomy podcast and we're going to be

550

00:23:12,350 --> 00:23:09,570

working to bring about eight minutes of

551  
00:23:14,450 --> 00:23:12,360  
content every single day of 2009 out to

552  
00:23:16,220 --> 00:23:14,460  
the public one of the other really cool

553  
00:23:19,129 --> 00:23:16,230  
programs is called from the earth to the

554  
00:23:22,700 --> 00:23:19,139  
universe and it's a public art program

555  
00:23:26,180 --> 00:23:22,710  
to bring the best images of space to the

556  
00:23:28,159 --> 00:23:26,190  
public in large format images that will

557  
00:23:30,409 --> 00:23:28,169  
be set out in public areas there's

558  
00:23:34,250 --> 00:23:30,419  
already a prototype exhibit up in

559  
00:23:37,850 --> 00:23:34,260  
Liverpool we have school programs we're

560  
00:23:41,210 --> 00:23:37,860  
working on producing \$10 telescopes to

561  
00:23:45,470 --> 00:23:41,220  
get out to the kids of the planet it's

562  
00:23:47,360 --> 00:23:45,480  
everything from science to art to just

563  
00:23:50,000 --> 00:23:47,370

trying to get people to go outside and

564

00:23:51,860 --> 00:23:50,010

shut their lights off and see what the

565

00:23:54,259 --> 00:23:51,870

sky looks like without all the light

566

00:23:58,129 --> 00:23:54,269

pollution that's so that's quite an

567

00:23:59,750 --> 00:23:58,139

undertaking how can our listeners how

568

00:24:03,019 --> 00:23:59,760

can our listeners become involved in

569

00:24:06,139 --> 00:24:03,029

some way well the the best way to find

570

00:24:07,389 --> 00:24:06,149

out what's going on is to go to the

571

00:24:09,710 --> 00:24:07,399

international year of astronomy

572

00:24:13,730 --> 00:24:09,720

international website which is astronomy

573

00:24:15,869 --> 00:24:13,740

2009 o RG and it lists all the different

574

00:24:18,299 --> 00:24:15,879

programs and their individual websites

575

00:24:21,419 --> 00:24:18,309

and if you want to talk to other people

576

00:24:22,589 --> 00:24:21,429

the forums the online discussion boards

577

00:24:25,229 --> 00:24:22,599

for the international year of astronomy

578

00:24:28,439 --> 00:24:25,239

are located over on cloudy night so just

579

00:24:30,029 --> 00:24:28,449

google cloudy nights forums anna you can

580

00:24:32,729 --> 00:24:30,039

find out what people are saying there

581

00:24:34,829 --> 00:24:32,739

and most nations have their own version

582

00:24:36,329 --> 00:24:34,839

of the I way website so for instance

583

00:24:41,939 --> 00:24:36,339

here in the United States we're a truant

584

00:24:44,669 --> 00:24:41,949

we're astronomy 2009 us try googling iya

585

00:24:46,229 --> 00:24:44,679

2009 in your country name or if you go

586

00:24:49,499 --> 00:24:46,239

to the International web website

587

00:24:51,059 --> 00:24:49,509

astronomy 2009 dot o RG you can find the

588

00:24:54,029 --> 00:24:51,069

website for your individual nation

589

00:24:56,339 --> 00:24:54,039

that's fantastic that's fantastic but of

590

00:24:58,199 --> 00:24:56,349

course you don't have to wait for 2009

591

00:25:00,359 --> 00:24:58,209

to enjoy astronomy and you certainly

592

00:25:03,180 --> 00:25:00,369

don't have to wait for 2009 to enjoy

593

00:25:06,779 --> 00:25:03,190

Pamela gay and phasic a non astronomy

594

00:25:08,489 --> 00:25:06,789

cast just to annoy you even more Pamela

595

00:25:10,859 --> 00:25:08,499

if our listeners want to ask you a

596

00:25:13,439 --> 00:25:10,869

question for your astronomy cast what's

597

00:25:16,199 --> 00:25:13,449

the best way they can do that you can

598

00:25:19,499 --> 00:25:16,209

drop us an email at info at astronomy

599

00:25:21,029 --> 00:25:19,509

cast com well thank you for that Pamela

600

00:25:22,709 --> 00:25:21,039

and I'm sure our listeners can come up

601  
00:25:26,519 --> 00:25:22,719  
with even more questions to stump you

602  
00:25:29,249 --> 00:25:26,529  
and thank you again for all your efforts

603  
00:25:31,699 --> 00:25:29,259  
especially without reach because i love

604  
00:25:34,259 --> 00:25:31,709  
outreach myself i love doing outreach to

605  
00:25:35,999 --> 00:25:34,269  
bring the magic of science and in your

606  
00:25:38,430 --> 00:25:36,009  
case the magic of astronomy to as many

607  
00:25:40,589 --> 00:25:38,440  
people as possible well it's been my

608  
00:25:41,879 --> 00:25:40,599  
pleasure richard and keep doing what

609  
00:25:43,139 --> 00:25:41,889  
you're doing we need more people

610  
00:25:57,780 --> 00:25:43,149  
thinking critically about the world

611  
00:26:03,940 --> 00:26:00,820  
death from the skies is the latest book

612  
00:26:06,520 --> 00:26:03,950  
by our good friend dr. Phil Plait also

613  
00:26:08,799 --> 00:26:06,530

known as the bad astronomer and here

614

00:26:11,710 --> 00:26:08,809

with her take on Phil's latest book his

615

00:26:15,250 --> 00:26:11,720

first year astronomy student and new

616

00:26:16,780 --> 00:26:15,260

skeptic zone member tiffany day as a

617

00:26:18,940 --> 00:26:16,790

current first-year astronomy and

618

00:26:20,890 --> 00:26:18,950

astrophysics student i couldn't think of

619

00:26:22,930 --> 00:26:20,900

a book i've recently been anticipating

620

00:26:25,000 --> 00:26:22,940

more than dr. phillip plates death from

621

00:26:27,700 --> 00:26:25,010

the skies these are the ways the world

622

00:26:30,610 --> 00:26:27,710

will end and man was i not disappointed

623

00:26:32,169 --> 00:26:30,620

in true phil plait style for those who

624

00:26:34,660 --> 00:26:32,179

are familiar with his blog bad astronomy

625

00:26:37,330 --> 00:26:34,670

the book is littered with humor and

626  
00:26:39,610 --> 00:26:37,340  
witty remarks woven in between detailed

627  
00:26:41,200 --> 00:26:39,620  
scientific explanations of the various

628  
00:26:43,090 --> 00:26:41,210  
possible scenarios which could

629  
00:26:46,480 --> 00:26:43,100  
ultimately lead to the demise of our

630  
00:26:48,130 --> 00:26:46,490  
little blue planet earth bill covers all

631  
00:26:51,640 --> 00:26:48,140  
the deadly weapons that astronomy has

632  
00:26:54,910 --> 00:26:51,650  
unveiled to us asteroid impacts comet

633  
00:26:58,330 --> 00:26:54,920  
impacts solar flares nearby supernova

634  
00:27:01,419 --> 00:26:58,340  
explosions gamma ray bursts black holes

635  
00:27:05,410 --> 00:27:01,429  
and much much more even the ultimate

636  
00:27:07,390 --> 00:27:05,420  
death of the universe itself yet through

637  
00:27:09,460 --> 00:27:07,400  
all the doom and gloom of the ways the

638  
00:27:11,320 --> 00:27:09,470

universe is trying to kill us we are

639

00:27:13,180 --> 00:27:11,330

constantly reminded that the likelihood

640

00:27:15,160 --> 00:27:13,190

of being engulfed by a gamma ray burst

641

00:27:18,310 --> 00:27:15,170

or sucked into a black hole are

642

00:27:20,440 --> 00:27:18,320

extremely unlikely it's a science

643

00:27:22,360 --> 00:27:20,450

beneath all these hypothetical scenarios

644

00:27:25,720 --> 00:27:22,370

that makes the book so interesting and

645

00:27:28,600 --> 00:27:25,730

or inspiring the reality of the universe

646

00:27:31,030 --> 00:27:28,610

is much more amazing and dangerous than

647

00:27:33,280 --> 00:27:31,040

any doomsday movie or biblical rapture

648

00:27:36,610 --> 00:27:33,290

could ever hope to convey and this book

649

00:27:38,470 --> 00:27:36,620

illustrates that point perfectly yet it

650

00:27:40,480 --> 00:27:38,480

is important to know that despite the

651  
00:27:43,720 --> 00:27:40,490  
possibility of all this impending doom

652  
00:27:45,640 --> 00:27:43,730  
we're actually quite safe our small

653  
00:27:47,740 --> 00:27:45,650  
little planet is in a great location and

654  
00:27:51,919 --> 00:27:47,750  
our atmosphere works well as a shield

655  
00:27:53,269 --> 00:27:51,929  
between us and the harsh vacuum of space

656  
00:27:54,769 --> 00:27:53,279  
I think this book does a really good job

657  
00:27:57,560 --> 00:27:54,779  
of putting everything into perspective

658  
00:28:00,980 --> 00:27:57,570  
and realizing how extremely lucky we are

659  
00:28:02,539 --> 00:28:00,990  
to be alive in the first place although

660  
00:28:05,239 --> 00:28:02,549  
most of the dangers that lurk in the

661  
00:28:06,799 --> 00:28:05,249  
universe seemed quite scary Phil reminds

662  
00:28:08,690 --> 00:28:06,809  
us that it's pretty much certain we

663  
00:28:11,239 --> 00:28:08,700

won't experience any of this stuff in

664

00:28:14,259 --> 00:28:11,249

our own lifetimes so there's no need to

665

00:28:16,909 --> 00:28:14,269

get your knickers in a twist with War II

666

00:28:19,789 --> 00:28:16,919

the book is also very nicely worded

667

00:28:21,710 --> 00:28:19,799

without too much scientific jargon so

668

00:28:23,629 --> 00:28:21,720

you don't have to be a PhD astronomy

669

00:28:26,930 --> 00:28:23,639

student to understand the science behind

670

00:28:28,789 --> 00:28:26,940

all the events that are discussed having

671

00:28:30,980 --> 00:28:28,799

myself been studying just this past

672

00:28:34,249 --> 00:28:30,990

semester the details of nuclear fusion

673

00:28:36,889 --> 00:28:34,259

of hydrogen nuclei into helium which is

674

00:28:38,389 --> 00:28:36,899

the sun's source of energy I found the

675

00:28:40,639 --> 00:28:38,399

books explanation of this to be

676

00:28:43,549 --> 00:28:40,649

extremely clear and thorough without

677

00:28:46,119 --> 00:28:43,559

sounding too complicated this is pretty

678

00:28:48,440 --> 00:28:46,129

much echoed throughout the whole book

679

00:28:50,090 --> 00:28:48,450

there really are lots of different

680

00:28:53,060 --> 00:28:50,100

potential ways that the universe could

681

00:28:54,889 --> 00:28:53,070

kill us the only way to fully understand

682

00:28:56,810 --> 00:28:54,899

the reality and the power of these

683

00:28:58,700 --> 00:28:56,820

concepts is to indulge yourself in

684

00:29:01,279 --> 00:28:58,710

astronomy one of the most exhilarating

685

00:29:03,769 --> 00:29:01,289

and downright interesting sciences that

686

00:29:07,159 --> 00:29:03,779

there is and this book is the perfect

687

00:29:09,080 --> 00:29:07,169

tool to use after all astronomy is the

688

00:29:12,799 --> 00:29:09,090

study of space and the universe and

689

00:29:14,570 --> 00:29:12,809

we're living in it in my opinion Phil

690

00:29:16,909 --> 00:29:14,580

plates book does exactly what his blog

691

00:29:18,950 --> 00:29:16,919

bad astronomy does and highlights the

692

00:29:21,769 --> 00:29:18,960

amazement and the wonder of the space

693

00:29:23,210 --> 00:29:21,779

around us while also encouraging us to

694

00:29:26,299 --> 00:29:23,220

fall in love with the science of

695

00:29:28,460 --> 00:29:26,309

astronomy so if you love scary

696

00:29:31,430 --> 00:29:28,470

Armageddon movies about asteroid impacts

697

00:29:33,289 --> 00:29:31,440

and tsunamis and ice ages why not try

698

00:29:50,250 --> 00:29:33,299

the real thing and grab yourself a copy

699

00:29:54,420 --> 00:29:52,800

I'm Carly Sturgis and for this interview

700

00:29:57,090 --> 00:29:54,430

i'll be talking to a man has been a

701  
00:29:59,730 --> 00:29:57,100  
journalist for 20 years 14 of those as a

702  
00:30:02,130 --> 00:29:59,740  
science correspondent his degree is in

703  
00:30:04,560 --> 00:30:02,140  
geology but whilst working for science

704  
00:30:06,150 --> 00:30:04,570  
magazine and several science programs he

705  
00:30:08,990 --> 00:30:06,160  
has tackled a number of different fields

706  
00:30:11,730 --> 00:30:09,000  
from quantum physics to microbiology

707  
00:30:14,160 --> 00:30:11,740  
despite this I can't reveal his real

708  
00:30:17,910 --> 00:30:14,170  
name because he chooses to be anonymous

709  
00:30:19,950 --> 00:30:17,920  
online he's known as pothole of 54 one

710  
00:30:22,700 --> 00:30:19,960  
of the most popular science broadcasters

711  
00:30:25,020 --> 00:30:22,710  
on the free hosting video site YouTube

712  
00:30:27,210 --> 00:30:25,030  
within a week of him uploading short

713  
00:30:30,360 --> 00:30:27,220

films on topics ranging from climate

714

00:30:32,940 --> 00:30:30,370

control evolution human ancestry and the

715

00:30:35,640 --> 00:30:32,950

scientific method he reaches an audience

716

00:30:38,310 --> 00:30:35,650

of hundreds of thousands one on climate

717

00:30:41,730 --> 00:30:38,320

change has recently hit 13 thousand

718

00:30:44,610 --> 00:30:41,740

views just within two weeks pothole of

719

00:30:46,680 --> 00:30:44,620

54 describes his made easy series is

720

00:30:48,870 --> 00:30:46,690

designed to explain the evidence that

721

00:30:51,630 --> 00:30:48,880

shows how we got here from the Big Bang

722

00:30:53,520 --> 00:30:51,640

to human migration Out of Africa and to

723

00:30:55,290 --> 00:30:53,530

counter the unsupported idea that this

724

00:30:57,690 --> 00:30:55,300

somehow happened through the power of an

725

00:31:00,720 --> 00:30:57,700

invisible being originally from England

726

00:31:02,970 --> 00:31:00,730

he has retired to sunny Australia and he

727

00:31:05,700 --> 00:31:02,980

gives us an exclusive for the skeptic

728

00:31:08,010 --> 00:31:05,710

zone firstly I'd like to thank pothole

729

00:31:10,760 --> 00:31:08,020

or 54 for giving us the opportunity to

730

00:31:13,380 --> 00:31:10,770

talk to him here on the skeptic zone

731

00:31:15,600 --> 00:31:13,390

what was the original inspiration for

732

00:31:18,450 --> 00:31:15,610

using YouTube and have you tried working

733

00:31:20,160 --> 00:31:18,460

in other problems and media before well

734

00:31:23,430 --> 00:31:20,170

i was on a christian forum for about a

735

00:31:25,620 --> 00:31:23,440

year but i found it was impossible to

736

00:31:27,270 --> 00:31:25,630

debate subjects like evolution in the

737

00:31:28,770 --> 00:31:27,280

age of the earth because fundamentalists

738

00:31:33,420 --> 00:31:28,780

on the forum simply had no understanding

739

00:31:34,980 --> 00:31:33,430

of basic biology and geology they didn't

740

00:31:37,050 --> 00:31:34,990

know what the theory of evolution said

741

00:31:38,910 --> 00:31:37,060

for example some people thought it meant

742

00:31:40,500 --> 00:31:38,920

that one species could give birth to an

743

00:31:43,170 --> 00:31:40,510

animal of a completely different species

744

00:31:45,540 --> 00:31:43,180

and a lot of people thought that life

745

00:31:47,400 --> 00:31:45,550

came from the Big Bang so instead of

746

00:31:49,320 --> 00:31:47,410

having an intelligent discussion I found

747

00:31:51,600 --> 00:31:49,330

I was having to teach remedial biology

748

00:31:53,700 --> 00:31:51,610

and physics and this happened again and

749

00:31:55,770 --> 00:31:53,710

again as more people joined the forum so

750

00:31:58,080 --> 00:31:55,780

the reason I decided to make a video was

751

00:32:00,480 --> 00:31:58,090

simply to explain all this in an easy

752

00:32:02,070 --> 00:32:00,490

form that people could understand and

753

00:32:04,110 --> 00:32:02,080

then I could refer them to the video

754

00:32:06,990 --> 00:32:04,120

every time I had to repeat my

755

00:32:08,850 --> 00:32:07,000

what do you consider is a useful formula

756

00:32:10,500 --> 00:32:08,860

to keep in mind if you're hoping to

757

00:32:14,310 --> 00:32:10,510

produce youtube videos that are

758

00:32:16,230 --> 00:32:14,320

educational i would say easiest thing

759

00:32:18,660 --> 00:32:16,240

don't just think you can sit in front of

760

00:32:21,060 --> 00:32:18,670

a camera and fluent words will pour out

761

00:32:24,120 --> 00:32:21,070

and mesmerize your audience because that

762

00:32:26,700 --> 00:32:24,130

doesn't happen even stand-ups camera

763

00:32:28,770 --> 00:32:26,710

have to start with the script so write

764

00:32:31,740 --> 00:32:28,780

your script polish it polish it again

765

00:32:34,380 --> 00:32:31,750

polish it again which basically means

766

00:32:36,320 --> 00:32:34,390

cutting any superfluous junk and make

767

00:32:39,540 --> 00:32:36,330

the final script as tight as possible

768

00:32:41,160 --> 00:32:39,550

well considering that more than 120

769

00:32:43,500 --> 00:32:41,170

million americans believe that God

770

00:32:45,390 --> 00:32:43,510

created Adam and Eve more than 10,000

771

00:32:47,760 --> 00:32:45,400

years ago how do you suggest that people

772

00:32:49,860 --> 00:32:47,770

deal with such predominant beliefs that

773

00:32:52,230 --> 00:32:49,870

challenge evolution both online and

774

00:32:54,060 --> 00:32:52,240

offline well I grew up in Britain and I

775

00:32:56,760 --> 00:32:54,070

don't think I ever met anyone who

776

00:32:59,100 --> 00:32:56,770

thought the universe was 6,500 years old

777

00:33:02,340 --> 00:32:59,110

and I was a choir boy at Winchester

778

00:33:03,990 --> 00:33:02,350

Cathedral even the Anglican bishop took

779

00:33:05,910 --> 00:33:04,000

a more metaphorical approach to the

780

00:33:07,530 --> 00:33:05,920

Bible I can only think of one person I

781

00:33:10,050 --> 00:33:07,540

knew at University it was a practicing

782

00:33:12,450 --> 00:33:10,060

Christian and in Australia I've met

783

00:33:14,430 --> 00:33:12,460

quite a few more but I get on very well

784

00:33:16,890 --> 00:33:14,440

with them in the United States as much

785

00:33:18,470 --> 00:33:16,900

more polarization over this issue and I

786

00:33:20,730 --> 00:33:18,480

I think one reason might be the

787

00:33:22,860 --> 00:33:20,740

isolation of so many fundamentalists who

788

00:33:25,260 --> 00:33:22,870

live in communities where everybody

789

00:33:28,950 --> 00:33:25,270

believes in God and everybody around you

790

00:33:32,310 --> 00:33:28,960

your family your community it's just a

791

00:33:34,200 --> 00:33:32,320

given and they probably don't think

792

00:33:36,420 --> 00:33:34,210

they've ever met atheists of course they

793

00:33:38,940 --> 00:33:36,430

have but since no one is really able to

794

00:33:41,640 --> 00:33:38,950

declare their atheism in communities

795

00:33:43,440 --> 00:33:41,650

like that most people think that there

796

00:33:45,360 --> 00:33:43,450

aren't any I think they're genuinely

797

00:33:47,220 --> 00:33:45,370

surprised when I chat to them online and

798

00:33:51,120 --> 00:33:47,230

they discover that I'm polite quite

799

00:33:53,250 --> 00:33:51,130

happy and very sympathetic I don't have

800

00:33:55,680 --> 00:33:53,260

a problem with people's personal beliefs

801  
00:33:58,470 --> 00:33:55,690  
at all as long as their personal and

802  
00:34:00,510 --> 00:33:58,480  
their beliefs the only time this becomes

803  
00:34:03,440 --> 00:34:00,520  
a problem is when people start preaching

804  
00:34:05,730 --> 00:34:03,450  
their beliefs as the absolute truth and

805  
00:34:08,130 --> 00:34:05,740  
something that has to be imposed on

806  
00:34:10,860 --> 00:34:08,140  
others one of the comments on your site

807  
00:34:13,050 --> 00:34:10,870  
asks you whether you're inspired by the

808  
00:34:14,490 --> 00:34:13,060  
likes of Carl Sagan and you say that he

809  
00:34:15,440 --> 00:34:14,500  
was not a formative influence but

810  
00:34:17,839 --> 00:34:15,450  
certainly someone you

811  
00:34:19,520 --> 00:34:17,849  
came across later in life so who do your

812  
00:34:22,669 --> 00:34:19,530  
creditors being a formative influence

813  
00:34:24,560 --> 00:34:22,679

when you were growing up two things one

814

00:34:26,419 --> 00:34:24,570

was the moon landing which I avidly

815

00:34:29,000 --> 00:34:26,429

followed as a kid and the other was a

816

00:34:30,889 --> 00:34:29,010

science fiction program in Britain

817

00:34:32,659 --> 00:34:30,899

called doom watch which was about a

818

00:34:35,030 --> 00:34:32,669

government department comprising three

819

00:34:36,619 --> 00:34:35,040

scientists who acted as sort of trouble

820

00:34:39,889 --> 00:34:36,629

shooters for any science related

821

00:34:42,020 --> 00:34:39,899

problems that struck the UK seemed to me

822

00:34:43,609 --> 00:34:42,030

they made science look really cool and I

823

00:34:46,099 --> 00:34:43,619

thought that's what I want to do we're

824

00:34:47,990 --> 00:34:46,109

psychedelic cravats and flared jeans and

825

00:34:50,720 --> 00:34:48,000

zap around the country like Batman with

826

00:34:53,690 --> 00:34:50,730

a slide rule solving all kinds of

827

00:34:54,950 --> 00:34:53,700

science problems recently dr. cow in an

828

00:34:56,569 --> 00:34:54,960

interview with the skeptic zone

829

00:34:58,609 --> 00:34:56,579

expressed some well Dermot that its

830

00:35:00,349 --> 00:34:58,619

evolutionary theory which produces more

831

00:35:02,180 --> 00:35:00,359

opposition than any other scientific

832

00:35:04,250 --> 00:35:02,190

theory so do you think there's more

833

00:35:06,050 --> 00:35:04,260

emotional involvement with evolution

834

00:35:10,010 --> 00:35:06,060

creationism that sparks is sort of

835

00:35:12,079 --> 00:35:10,020

debate quick answer yes long answer well

836

00:35:14,660 --> 00:35:12,089

the emotional reaction to this is really

837

00:35:17,420 --> 00:35:14,670

down to one simple thing evolution means

838

00:35:19,569 --> 00:35:17,430

that we are not as far as fundamentalist

839

00:35:21,290 --> 00:35:19,579

concern means that we're not special

840

00:35:22,849 --> 00:35:21,300

fundamentalists have an absolute

841

00:35:24,800 --> 00:35:22,859

abhorrence of the idea that humans

842

00:35:26,510 --> 00:35:24,810

aren't special that we're animals like

843

00:35:28,280 --> 00:35:26,520

any other animal and that we're

844

00:35:30,230 --> 00:35:28,290

descended from animals they've been

845

00:35:32,780 --> 00:35:30,240

taught for so long that this specialness

846

00:35:35,780 --> 00:35:32,790

is what gives us our purpose in life and

847

00:35:37,910 --> 00:35:35,790

without purpose and specialness in our

848

00:35:40,069 --> 00:35:37,920

lives then our lives are supposedly

849

00:35:41,720 --> 00:35:40,079

empty now you and I can cope very well

850

00:35:43,430 --> 00:35:41,730

with the concept of evolution because we

851  
00:35:45,410 --> 00:35:43,440  
think our lives can still be rich and

852  
00:35:47,120 --> 00:35:45,420  
fulfilling and we make our own purpose

853  
00:35:49,940 --> 00:35:47,130  
in life if we feel we need to have a

854  
00:35:52,370 --> 00:35:49,950  
purpose but they simply can't do this

855  
00:35:55,400 --> 00:35:52,380  
and taking away that specialness takes

856  
00:35:57,319 --> 00:35:55,410  
away their lives and with it their after

857  
00:36:00,260 --> 00:35:57,329  
lives and that's why they fight the idea

858  
00:36:01,460 --> 00:36:00,270  
of evolution so vociferously I don't

859  
00:36:03,290 --> 00:36:01,470  
think evolution is being attacked

860  
00:36:05,150 --> 00:36:03,300  
because of what Hitler Hitler did I I

861  
00:36:07,430 --> 00:36:05,160  
think that what Hitler did is being used

862  
00:36:09,050 --> 00:36:07,440  
as a reason to attack evolution so it's

863  
00:36:10,490 --> 00:36:09,060

really the other way around but of

864

00:36:12,410 --> 00:36:10,500

course the attack misses the mark

865

00:36:14,839 --> 00:36:12,420

because Hitler didn't understand the

866

00:36:16,430 --> 00:36:14,849

principle that natural selection it has

867

00:36:18,710 --> 00:36:16,440

nothing to do with genocide or the

868

00:36:21,319 --> 00:36:18,720

triumph of the strong over the weak it's

869

00:36:23,300 --> 00:36:21,329

about survival of the fittest and what

870

00:36:25,579 --> 00:36:23,310

made some humans fitter was their

871

00:36:29,120 --> 00:36:25,589

ability to cooperate and help help one

872

00:36:32,210 --> 00:36:29,130

another along tribes that did this sir

873

00:36:34,069 --> 00:36:32,220

lived so they were fitter tribes that

874

00:36:36,319 --> 00:36:34,079

were selfish and uncooperative fell

875

00:36:37,880 --> 00:36:36,329

apart now the fact that Hitler referred

876

00:36:39,710 --> 00:36:37,890

to the principle of natural selection as

877

00:36:41,839 --> 00:36:39,720

part of his justification for genocide

878

00:36:44,120 --> 00:36:41,849

is a very good reason why we need to

879

00:36:46,130 --> 00:36:44,130

teach natural selection and evolution in

880

00:36:49,099 --> 00:36:46,140

schools so that people understand the

881

00:36:50,900 --> 00:36:49,109

theories properly it appears that people

882

00:36:53,089 --> 00:36:50,910

who believe in intelligent design find

883

00:36:55,430 --> 00:36:53,099

the DNA code less problematic than the

884

00:36:57,620 --> 00:36:55,440

ideas of Darwin and your video certainly

885

00:36:59,059 --> 00:36:57,630

draw upon that so do you have an

886

00:37:01,279 --> 00:36:59,069

explanation for why belief in

887

00:37:03,859 --> 00:37:01,289

intelligent design is Noah so widespread

888

00:37:06,259 --> 00:37:03,869

as in the United States where most of

889

00:37:07,279 --> 00:37:06,269

your viewers come from I think there's a

890

00:37:09,049 --> 00:37:07,289

much greater tradition of

891

00:37:11,809 --> 00:37:09,059

intellectualism if you want to call it

892

00:37:13,880 --> 00:37:11,819

that and critical thinking in Europe the

893

00:37:17,089 --> 00:37:13,890

United States is a pioneering country

894

00:37:20,390 --> 00:37:17,099

and intellectualism over there is seen

895

00:37:22,910 --> 00:37:20,400

as elitist and I think critical thinking

896

00:37:25,269 --> 00:37:22,920

is seen as something subversive but i

897

00:37:27,380 --> 00:37:25,279

have to say there's a clear divide

898

00:37:29,059 --> 00:37:27,390

fundamentalism is strong south of the

899

00:37:31,249 --> 00:37:29,069

mason-dixon line and in what they call

900

00:37:33,319 --> 00:37:31,259

the fly of a country but this is worlds

901  
00:37:35,710 --> 00:37:33,329  
apart from the America represented by

902  
00:37:37,880 --> 00:37:35,720  
places like Massachusetts and California

903  
00:37:40,099 --> 00:37:37,890  
one of the great things about your

904  
00:37:42,319 --> 00:37:40,109  
youtube series is that you make it

905  
00:37:44,480 --> 00:37:42,329  
freely available as a resource and the

906  
00:37:46,099 --> 00:37:44,490  
made easy series of videos are able to

907  
00:37:47,990 --> 00:37:46,109  
be freely copied and distributed for

908  
00:37:49,249 --> 00:37:48,000  
educational purposes and you said that

909  
00:37:52,309 --> 00:37:49,259  
you want to make it available for

910  
00:37:54,140 --> 00:37:52,319  
schools despite this other elements that

911  
00:37:55,490 --> 00:37:54,150  
you keep in mind in order to make them

912  
00:37:57,680 --> 00:37:55,500  
school friendly and is there a

913  
00:38:00,019 --> 00:37:57,690

limitation upon at the age range for

914

00:38:02,120 --> 00:38:00,029

schools I made them freely available

915

00:38:04,249 --> 00:38:02,130

because I don't want to make a business

916

00:38:06,620 --> 00:38:04,259

out of this I'm happy if people can

917

00:38:09,109 --> 00:38:06,630

learn something from the videos but

918

00:38:11,089 --> 00:38:09,119

after the made easy series came out I

919

00:38:14,809 --> 00:38:11,099

started getting a lot of dvds from

920

00:38:16,309 --> 00:38:14,819

teachers asking to have copies that they

921

00:38:18,559 --> 00:38:16,319

could show them in schools and colleges

922

00:38:21,589 --> 00:38:18,569

now they're not primarily meant as a

923

00:38:24,920 --> 00:38:21,599

teaching tool for science obviously they

924

00:38:27,079 --> 00:38:24,930

are part of a debating tool opposing the

925

00:38:30,529 --> 00:38:27,089

teaching of intelligent design or the

926

00:38:33,200 --> 00:38:30,539

the idea that creationism is somehow a

927

00:38:35,480 --> 00:38:33,210

science so they're really not meant for

928

00:38:37,039 --> 00:38:35,490

children I think that's rather an odd

929

00:38:39,200 --> 00:38:37,049

thing to say but but that wasn't my

930

00:38:41,440 --> 00:38:39,210

intention so it's a bit reluctant at

931

00:38:44,740 --> 00:38:41,450

first to send the DVDs out to this

932

00:38:46,810 --> 00:38:44,750

I had a conversation with a couple of

933

00:38:50,410 --> 00:38:46,820

teachers and I discovered something

934

00:38:52,930 --> 00:38:50,420

which made me change my mind and what

935

00:38:54,339 --> 00:38:52,940

they told me was that religion is coming

936

00:38:56,470 --> 00:38:54,349

into the science classroom they are

937

00:38:58,900 --> 00:38:56,480

actually discussing these things like it

938

00:39:01,390 --> 00:38:58,910

or not and they say that these videos

939

00:39:03,819 --> 00:39:01,400

helped put the religion science debate

940

00:39:05,530 --> 00:39:03,829

in context in Australia we're heading

941

00:39:07,569 --> 00:39:05,540

towards a national curriculum and it's

942

00:39:09,490 --> 00:39:07,579

caused a lot of debate amongst educators

943

00:39:11,319 --> 00:39:09,500

and politicians about the sort of things

944

00:39:13,810 --> 00:39:11,329

that should be included do you think

945

00:39:16,270 --> 00:39:13,820

that YouTube has a place in helping out

946

00:39:19,000 --> 00:39:16,280

with the education of young people would

947

00:39:21,010 --> 00:39:19,010

you for example endorse the scientists

948

00:39:23,829 --> 00:39:21,020

and schools program as being a useful

949

00:39:25,870 --> 00:39:23,839

strategy I'd love to make science more

950

00:39:27,880 --> 00:39:25,880

fun and more interesting I think we're

951  
00:39:31,210 --> 00:39:27,890  
all born with a natural curiosity and we

952  
00:39:33,339 --> 00:39:31,220  
want to know how things work even small

953  
00:39:35,589 --> 00:39:33,349  
boys throwing stones into a mud puddle

954  
00:39:37,030 --> 00:39:35,599  
is science it's the kind of science

955  
00:39:39,670 --> 00:39:37,040  
experiment they're looking to see what

956  
00:39:41,260 --> 00:39:39,680  
happens if only schools would harness

957  
00:39:43,150 --> 00:39:41,270  
that and work with it instead of

958  
00:39:45,940 --> 00:39:43,160  
sticking kids in classrooms and getting

959  
00:39:48,400 --> 00:39:45,950  
them to recite Newton's laws of motion I

960  
00:39:51,190 --> 00:39:48,410  
think that they would find fewer kids

961  
00:39:53,290 --> 00:39:51,200  
dropping out of science because kids

962  
00:39:55,030 --> 00:39:53,300  
aunt a year seven fascinated and excited

963  
00:39:57,250 --> 00:39:55,040

by science and then they leave year ten

964

00:40:00,730 --> 00:39:57,260

bored stiff with it what is going wrong

965

00:40:02,530 --> 00:40:00,740

during those three years I think making

966

00:40:04,329 --> 00:40:02,540

science much more about experimenting

967

00:40:05,950 --> 00:40:04,339

and getting kids to discover things for

968

00:40:08,050 --> 00:40:05,960

themselves and work things out for

969

00:40:10,680 --> 00:40:08,060

themselves I think that's what would

970

00:40:12,819 --> 00:40:10,690

really keep that spark of interest going

971

00:40:15,760 --> 00:40:12,829

now the scientists in Schools program

972

00:40:16,809 --> 00:40:15,770

that you mentioned great idea yeah I did

973

00:40:19,089 --> 00:40:16,819

have a look at this my kids were

974

00:40:20,290 --> 00:40:19,099

involved in another csir own initiative

975

00:40:22,900 --> 00:40:20,300

which was called the double helix

976

00:40:25,270 --> 00:40:22,910

program and they joined a two-day

977

00:40:27,760 --> 00:40:25,280

science program during the holidays it

978

00:40:29,559 --> 00:40:27,770

was great fun because they interacted

979

00:40:32,109 --> 00:40:29,569

with real scientists and did some fun

980

00:40:35,410 --> 00:40:32,119

hands-on experiments and yes I'd love to

981

00:40:37,059 --> 00:40:35,420

see more of that but regarding the

982

00:40:40,890 --> 00:40:37,069

online resources you have to be very

983

00:40:43,480 --> 00:40:40,900

careful a CSIRO website of course is

984

00:40:46,599 --> 00:40:43,490

reliable I'm happy with that but

985

00:40:48,700 --> 00:40:46,609

wikipedia a lot less so I I had a kid

986

00:40:52,270 --> 00:40:48,710

who wrote to me and said that he was

987

00:40:53,829 --> 00:40:52,280

using my videos as a source for a

988

00:40:55,059 --> 00:40:53,839

science essay and I was absolutely

989

00:40:57,519 --> 00:40:55,069

horrified I told

990

00:40:59,439 --> 00:40:57,529

that he shouldn't use an anonymous

991

00:41:01,630 --> 00:40:59,449

youtube video with as a source for

992

00:41:03,729 --> 00:41:01,640

anything I've said the same thing on the

993

00:41:05,559 --> 00:41:03,739

video for what I do do is encourage

994

00:41:07,420 --> 00:41:05,569

people to watch the videos and then

995

00:41:09,249 --> 00:41:07,430

hopefully go out and learn more find out

996

00:41:10,959 --> 00:41:09,259

more about this I mean and everything

997

00:41:14,170 --> 00:41:10,969

that I've given there you can find in

998

00:41:16,809 --> 00:41:14,180

school textbooks and I think a lot of

999

00:41:18,279 --> 00:41:16,819

people have taken that and gone out and

1000

00:41:20,620 --> 00:41:18,289

learned a lot more about it which is

1001  
00:41:22,089 --> 00:41:20,630  
fantastic I don't think you'll find many

1002  
00:41:25,509 --> 00:41:22,099  
people disagreeing about the necessity

1003  
00:41:27,519 --> 00:41:25,519  
of anonymity online I mean there's such

1004  
00:41:29,680 --> 00:41:27,529  
elements as personal safety right to a

1005  
00:41:32,019 --> 00:41:29,690  
choice professional dis Association

1006  
00:41:33,459 --> 00:41:32,029  
would you ever however consider outing

1007  
00:41:36,130 --> 00:41:33,469  
yourself and is it really necessary

1008  
00:41:38,499 --> 00:41:36,140  
anyway are there ventures that tempt you

1009  
00:41:39,759 --> 00:41:38,509  
to be public about your identity and do

1010  
00:41:41,259 --> 00:41:39,769  
you find that there's a comfortable

1011  
00:41:44,289 --> 00:41:41,269  
division that lets you get the job done

1012  
00:41:47,140 --> 00:41:44,299  
I keep myself anonymous because I still

1013  
00:41:49,150 --> 00:41:47,150

broadcast for two major networks in

1014

00:41:51,219 --> 00:41:49,160

particular so apart from the fact that

1015

00:41:53,890 --> 00:41:51,229

I'm very careful in my professional role

1016

00:41:55,390 --> 00:41:53,900

not to expose my personal views I i

1017

00:41:57,489 --> 00:41:55,400

think that there's a danger of

1018

00:41:59,109 --> 00:41:57,499

perception of bias obviously I also

1019

00:42:00,789 --> 00:41:59,119

didn't want fundamentalist hurrain the

1020

00:42:02,849 --> 00:42:00,799

network's I work for complaining that

1021

00:42:05,170 --> 00:42:02,859

they're employing the spawn of the devil

1022

00:42:08,049 --> 00:42:05,180

really there's no reason for me to give

1023

00:42:10,769 --> 00:42:08,059

my name but if I had to give my name for

1024

00:42:14,199 --> 00:42:10,779

some reason yeah I'm sure i'd do it and

1025

00:42:15,609 --> 00:42:14,209

thank you very much to pothole or 54 if

1026  
00:42:19,209 --> 00:42:15,619  
you would like to get to know more of

1027  
00:42:22,660 --> 00:42:19,219  
his work online head to youtube com

1028  
00:42:26,259 --> 00:42:22,670  
forward slash user forward slash

1029  
00:42:28,329 --> 00:42:26,269  
potholer 54 and if you head to that site

1030  
00:42:31,180 --> 00:42:28,339  
he will now discover that the updated

1031  
00:42:33,789 --> 00:42:31,190  
corrected high quality DVD version of

1032  
00:42:36,160 --> 00:42:33,799  
the made easy series is now ready for

1033  
00:42:38,739 --> 00:42:36,170  
distribution you have the opportunity to

1034  
00:42:50,239 --> 00:42:38,749  
download a free copy by following the

1035  
00:42:56,400 --> 00:42:53,069  
this is brian dunning from skep tide

1036  
00:42:58,229 --> 00:42:56,410  
calm skep tide is a short weekly podcast

1037  
00:43:00,599 --> 00:42:58,239  
taking a critical look at the

1038  
00:43:02,969 --> 00:43:00,609

pseudo-sciences that infect popular

1039

00:43:05,700 --> 00:43:02,979

culture whenever I'm not locked in the

1040

00:43:12,269 --> 00:43:05,710

recording studio I'm listening to the

1041

00:43:15,509 --> 00:43:12,279

skeptic zone internet censorship on the

1042

00:43:18,209 --> 00:43:15,519

13th of december 2008 about 200 people

1043

00:43:20,940 --> 00:43:18,219

turned up the forecourt of Sydney's town

1044

00:43:23,609 --> 00:43:20,950

hall to protest plans by the government

1045

00:43:25,529 --> 00:43:23,619

to censor the internet this could

1046

00:43:28,049 --> 00:43:25,539

possibly slow the internet down in

1047

00:43:30,749 --> 00:43:28,059

Australia by eighty-seven percent as the

1048

00:43:33,569 --> 00:43:30,759

government or whoever opened every

1049

00:43:36,630 --> 00:43:33,579

single exchange to look for unwarranted

1050

00:43:39,509 --> 00:43:36,640

or illegal content illegal internet

1051

00:43:41,549 --> 00:43:39,519

content is so broadly defined at law

1052

00:43:44,609 --> 00:43:41,559

that it covers everything from facebook

1053

00:43:47,609 --> 00:43:44,619

to myspace to Wikipedia and YouTube I

1054

00:43:54,000 --> 00:43:47,619

went down to the protest to see for

1055

00:43:57,810 --> 00:43:56,130

now some of you may remember Dave the

1056

00:44:00,330 --> 00:43:57,820

happy singer from an earlier episode of

1057

00:44:02,010 --> 00:44:00,340

the skeptic sunglo David hello Richard

1058

00:44:04,170 --> 00:44:02,020

how are you I'm really well here we are

1059

00:44:05,460 --> 00:44:04,180

in the center of the city downtown

1060

00:44:07,380 --> 00:44:05,470

Sydney and there are some people

1061

00:44:09,570 --> 00:44:07,390

gathered here for the internet protest

1062

00:44:11,700 --> 00:44:09,580

today yeah that's right were protesting

1063

00:44:14,310 --> 00:44:11,710

about the plan to introduce a mandatory

1064

00:44:16,590 --> 00:44:14,320

internet filter by the Communications

1065

00:44:18,330 --> 00:44:16,600

Minister Stephen Conroy it's just insane

1066

00:44:20,460 --> 00:44:18,340

is it I mean apart from the fact that

1067

00:44:21,750 --> 00:44:20,470

it's completely impractical it's going

1068

00:44:23,610 --> 00:44:21,760

to turn us into a laughingstock well

1069

00:44:26,730 --> 00:44:23,620

it's it's completely impractical it's

1070

00:44:29,550 --> 00:44:26,740

it's a dangerous precedent for an

1071

00:44:30,960 --> 00:44:29,560

allegedly free country it's a huge waste

1072

00:44:32,370 --> 00:44:30,970

of taxpayer money and the government

1073

00:44:33,930 --> 00:44:32,380

doesn't seem to be consulting either

1074

00:44:36,780 --> 00:44:33,940

with the industry or with the public on

1075

00:44:38,610 --> 00:44:36,790

this this just seems to be a huge [h\_\_h]

1076

00:44:39,960 --> 00:44:38,620

up and starts finish I tend to agree i

1077

00:44:41,700 --> 00:44:39,970

think it's probably something that

1078

00:44:44,460 --> 00:44:41,710

they've just pasta lating about and I

1079

00:44:46,740 --> 00:44:44,470

think they probably know deep down it's

1080

00:44:49,710 --> 00:44:46,750

just ridiculous and impossible but we'll

1081

00:44:52,800 --> 00:44:49,720

see I think of the important thing today

1082

00:44:54,840 --> 00:44:52,810

is that we get the point across that the

1083

00:44:56,610 --> 00:44:54,850

public is dead against this yeah the

1084

00:44:58,560 --> 00:44:56,620

industry will do its part in explaining

1085

00:45:01,950 --> 00:44:58,570

that this is utterly impractical and

1086

00:45:03,240 --> 00:45:01,960

unworkable and then we're just like us

1087

00:45:04,470 --> 00:45:03,250

we just got to trust the politicians to

1088

00:45:08,730 --> 00:45:04,480

make the right decision on the trust of

1089

00:45:11,750 --> 00:45:08,740

the politicians oh you know the show is

1090

00:45:13,860 --> 00:45:11,760

called the skipper loser over the

1091

00:45:16,140 --> 00:45:13,870

highlights I think must get to Scism is

1092

00:45:19,280 --> 00:45:16,150

an incompatible with my optimism or make

1093

00:45:21,330 --> 00:45:19,290

a good point Dave thank you no problem

1094

00:45:23,130 --> 00:45:21,340

and there are more people gathering

1095

00:45:24,540 --> 00:45:23,140

around here as I look around it's still

1096

00:45:26,970 --> 00:45:24,550

pretty hot and sticky incident today

1097

00:45:29,190 --> 00:45:26,980

hello hey you ain't fun what's your name

1098

00:45:31,020 --> 00:45:29,200

naive and why are you here today I'm

1099

00:45:34,860 --> 00:45:31,030

here to protest the censorship of the

1100

00:45:36,000 --> 00:45:34,870

internet which is wrong pretty much in a

1101

00:45:39,600 --> 00:45:36,010

nutshell they're going to take away

1102

00:45:40,770 --> 00:45:39,610

things like well what they consider the

1103

00:45:42,930 --> 00:45:40,780

bad stuff but what they're going to do

1104

00:45:45,210 --> 00:45:42,940

is there accidentally going to censor 20

1105

00:45:47,010 --> 00:45:45,220

million sites things like breast cancer

1106

00:45:49,290 --> 00:45:47,020

research and things like that because if

1107

00:45:51,300 --> 00:45:49,300

it has a picture of a breast that can be

1108

00:45:53,430 --> 00:45:51,310

classified as prawn and quite frankly

1109

00:45:55,800 --> 00:45:53,440

it's wrong if it's going to censor

1110

00:45:59,160 --> 00:45:55,810

things like a medical issue absolutely

1111

00:46:01,290 --> 00:45:59,170

so absolutely yeah and as I was thinking

1112

00:46:02,850 --> 00:46:01,300

before it's as if they could really do

1113

00:46:04,350 --> 00:46:02,860

this I mean it's going to be such a mess

1114

00:46:05,700 --> 00:46:04,360

if they try to bring it in well to be

1115

00:46:07,320 --> 00:46:05,710

quite frank they'd be going along the

1116

00:46:08,850 --> 00:46:07,330

same lines as China like if you go over

1117

00:46:10,440 --> 00:46:08,860

to China and you search something like

1118

00:46:11,730 --> 00:46:10,450

tanaman square pictures you will get

1119

00:46:13,080 --> 00:46:11,740

pictures of the tamanna and square but

1120

00:46:14,550 --> 00:46:13,090

you will not get any of the information

1121

00:46:16,500 --> 00:46:14,560

about the students or anything that

1122

00:46:18,570 --> 00:46:16,510

night that it's wrong government's

1123

00:46:20,130 --> 00:46:18,580

trying to censor things like I don't

1124

00:46:22,110 --> 00:46:20,140

know the issues that face people today

1125

00:46:23,640 --> 00:46:22,120

like as I said the medical issues and

1126

00:46:25,050 --> 00:46:23,650

things like that it's just I don't

1127

00:46:27,120 --> 00:46:25,060

understand why they would be doing it

1128

00:46:28,920 --> 00:46:27,130

like I think they're doing it for some

1129

00:46:30,120 --> 00:46:28,930

sort of weird popularity grab or

1130

00:46:31,440 --> 00:46:30,130

something well it's not going to be a

1131

00:46:32,790 --> 00:46:31,450

popularity grab it's actually going to

1132

00:46:34,530 --> 00:46:32,800

kill their popularity if you think about

1133

00:46:37,050 --> 00:46:34,540

it because a lot of the people use the

1134

00:46:40,500 --> 00:46:37,060

internet like every day for different

1135

00:46:41,880 --> 00:46:40,510

things like they're actually locking

1136

00:46:43,770 --> 00:46:41,890

things like chat sites and things like

1137

00:46:45,420 --> 00:46:43,780

that like the ways that people stay in

1138

00:46:46,980 --> 00:46:45,430

contact with their family like yeah

1139

00:46:48,030 --> 00:46:46,990

because there are certain I know certain

1140

00:46:49,230 --> 00:46:48,040

people who stay in contact through

1141

00:46:51,410 --> 00:46:49,240

certain forums and things like that

1142

00:46:53,720 --> 00:46:51,420

which I had the risk of being there

1143

00:46:55,250 --> 00:46:53,730

they do cover controversial issues yeah

1144

00:47:01,040 --> 00:46:55,260

to be quite honest in this day and age

1145

00:47:05,309 --> 00:47:03,870

everything is not perfect and if they're

1146

00:47:07,650 --> 00:47:05,319

going to try and sense the internet so

1147

00:47:09,300 --> 00:47:07,660

maybe cushion everything it's not right

1148

00:47:10,530 --> 00:47:09,310

you have to expose people to certain

1149

00:47:11,460 --> 00:47:10,540

issues otherwise they're not going to be

1150

00:47:13,079 --> 00:47:11,470

able to cope with it in the day-to-day

1151

00:47:14,819 --> 00:47:13,089

life if they are faced with it

1152

00:47:17,250 --> 00:47:14,829

absolutely and the rest of the first

1153

00:47:18,870 --> 00:47:17,260

world will be will be laughing at us

1154

00:47:20,930 --> 00:47:18,880

well pretty much in a nutshell they are

1155

00:47:23,940 --> 00:47:20,940

probably already laughing at it like

1156

00:47:25,260 --> 00:47:23,950

what are you gonna do yeah well we're

1157

00:47:30,120 --> 00:47:25,270

here today to do something about that

1158

00:47:32,339 --> 00:47:30,130

straight thank you very much and I'm

1159

00:47:36,150 --> 00:47:32,349

with Fiona Patten now with a wonderful

1160

00:47:39,240 --> 00:47:36,160

yellow t-shirt this is boat 16 party ova

1161

00:47:41,130 --> 00:47:39,250

you we're serious about sex goodness me

1162

00:47:42,960 --> 00:47:41,140

now what brings you here today well

1163

00:47:45,690 --> 00:47:42,970

we're the Australian sex parties so of

1164

00:47:47,069 --> 00:47:45,700

course the internet filter which is

1165

00:47:48,870 --> 00:47:47,079

going to want some of the only legal

1166

00:47:52,410 --> 00:47:48,880

content that it's going to ban or

1167

00:47:55,020 --> 00:47:52,420

blacklist is adult erotic material so

1168

00:47:57,839 --> 00:47:55,030

we're there to defend that the users and

1169

00:48:00,390 --> 00:47:57,849

and the providers of that adult material

1170

00:48:01,710 --> 00:48:00,400

that's right because it's as far as I

1171

00:48:03,780 --> 00:48:01,720

know in this country it's a completely

1172

00:48:05,640 --> 00:48:03,790

legitimate industry it is a completely

1173

00:48:07,200 --> 00:48:05,650

legal industry and the material that

1174

00:48:09,150 --> 00:48:07,210

they're talking about blacklisting I

1175

00:48:10,319 --> 00:48:09,160

mean this is not the the you know if you

1176

00:48:12,870 --> 00:48:10,329

don't want your children to see it this

1177

00:48:15,480 --> 00:48:12,880

is blacklisted so even adults can't

1178

00:48:18,180 --> 00:48:15,490

access its material that is in magazines

1179

00:48:20,819 --> 00:48:18,190

in news agents currently that's legal

1180

00:48:23,040 --> 00:48:20,829

for any adult buy from from an informant

1181

00:48:25,140 --> 00:48:23,050

from a newsagent or an adult shop and

1182

00:48:27,420 --> 00:48:25,150

now on the internet that material will

1183

00:48:30,089 --> 00:48:27,430

be deemed at the same the same as a

1184

00:48:32,339 --> 00:48:30,099

child sexual abuse that's just insane

1185

00:48:33,569 --> 00:48:32,349

look it's totally insane and i think you

1186

00:48:34,770 --> 00:48:33,579

know unfortunately think the

1187

00:48:36,990 --> 00:48:34,780

government's are starting to realize

1188

00:48:38,849 --> 00:48:37,000

this but they are under extraordinary

1189

00:48:41,640 --> 00:48:38,859

pressure from groups like the australian

1190

00:48:44,730 --> 00:48:41,650

christian lobby and family first who

1191

00:48:47,160 --> 00:48:44,740

believe that you know sex is you know is

1192

00:48:49,319 --> 00:48:47,170

the demon and it's a great skate go to

1193

00:48:50,500 --> 00:48:49,329

look at you know controlling speech and

1194

00:48:52,240 --> 00:48:50,510

controlling things let's

1195

00:48:54,070 --> 00:48:52,250

you sex because people don't like to

1196

00:48:55,990 --> 00:48:54,080

talk about it so it's an easy one for

1197

00:48:57,220 --> 00:48:56,000

them to kind of slip through you know

1198

00:48:59,410 --> 00:48:57,230

you don't you don't want to talk about

1199

00:49:00,940 --> 00:48:59,420

debbie does dallas the same as you don't

1200

00:49:03,370 --> 00:49:00,950

want you know there are always people

1201  
00:49:05,260 --> 00:49:03,380  
out there who want to restrict what we

1202  
00:49:06,880 --> 00:49:05,270  
do in our own bedrooms that's right you

1203  
00:49:08,830 --> 00:49:06,890  
know they they have their position and I

1204  
00:49:10,330 --> 00:49:08,840  
absolutely respect their position but I

1205  
00:49:13,720 --> 00:49:10,340  
don't see that it tests they have to

1206  
00:49:14,920 --> 00:49:13,730  
infringe on night on my rights and you

1207  
00:49:17,620 --> 00:49:14,930  
know if you look at this the policy of

1208  
00:49:19,150 --> 00:49:17,630  
do no harm they could learn something

1209  
00:49:21,770 --> 00:49:19,160  
from that they certainly could we'll all

1210  
00:49:23,780 --> 00:49:21,780  
the best to thank you very much

1211  
00:49:25,700 --> 00:49:23,790  
and I'm speaking with jury now who put

1212  
00:49:27,440 --> 00:49:25,710  
all this protest together how do you

1213  
00:49:28,940 --> 00:49:27,450

think it went today I think it went

1214

00:49:30,770 --> 00:49:28,950

really well is really encouraging to see

1215

00:49:32,870 --> 00:49:30,780

the turnout and the crowd response to

1216

00:49:35,420 --> 00:49:32,880

the speeches it will get was phenomenal

1217

00:49:37,700 --> 00:49:35,430

day and what's the next big protest you

1218

00:49:39,800 --> 00:49:37,710

have planned next big action is march in

1219

00:49:42,080 --> 00:49:39,810

march where we're going to be convening

1220

00:49:43,520 --> 00:49:42,090

all of the the digital liberty coalition

1221

00:49:44,960 --> 00:49:43,530

branches or all the different state

1222

00:49:47,630 --> 00:49:44,970

groups and we're going to be all

1223

00:49:49,190 --> 00:49:47,640

marching on parliament in canberra

1224

00:49:51,650 --> 00:49:49,200

that's going to be something so that

1225

00:49:54,620 --> 00:49:51,660

what went in much is that that's still

1226

00:49:56,600 --> 00:49:54,630

being planned but marcha marcha law is

1227

00:49:58,850 --> 00:49:56,610

the website there for that particular

1228

00:50:00,830 --> 00:49:58,860

campaign all the information will be

1229

00:50:02,510 --> 00:50:00,840

there so if I was just about to ask you

1230

00:50:05,360 --> 00:50:02,520

what's the best website people can go to

1231

00:50:07,400 --> 00:50:05,370

so much in March or yep or where else

1232

00:50:10,250 --> 00:50:07,410

coming up there's also no censorship dot

1233

00:50:13,240 --> 00:50:10,260

info which is the site that we've been

1234

00:50:15,680 --> 00:50:13,250

running to organize all of like today's

1235

00:50:17,780 --> 00:50:15,690

national actions and so they've got the

1236

00:50:20,140 --> 00:50:17,790

forums there's where we brainstorm ideas

1237

00:50:24,130 --> 00:50:20,150

get thrown up there there's also our

1238

00:50:26,540 --> 00:50:24,140

corporate website DLC jasna you

1239

00:50:28,880 --> 00:50:26,550

obviously we're a nonprofit organization

1240

00:50:30,950 --> 00:50:28,890

so they're just the more business end of

1241

00:50:34,320 --> 00:50:30,960

things there thank you very much thank

1242

00:50:39,600 --> 00:50:36,270

oh and if you'd like to know more about

1243

00:50:52,570 --> 00:50:39,610

Dave the happy singer just visit dave

1244

00:51:00,620 --> 00:50:55,970

now it's time for dr. Rachel reports

1245

00:51:02,630 --> 00:51:00,630

with dr. Rachel Dunlop hello everyone

1246

00:51:04,580 --> 00:51:02,640

and welcome to dr. Rachel reports and

1247

00:51:06,920 --> 00:51:04,590

today's segment concerns the use of

1248

00:51:09,380 --> 00:51:06,930

alternative medicine where conventional

1249

00:51:11,300 --> 00:51:09,390

medicine was desperately needed and what

1250

00:51:13,040 --> 00:51:11,310

makes this case even more distressing as

1251

00:51:14,600 --> 00:51:13,050

it involves the mistreatment and

1252

00:51:17,870 --> 00:51:14,610

terrible suffering of a defenseless

1253

00:51:19,220 --> 00:51:17,880

child by her brain damaged father now

1254

00:51:22,310 --> 00:51:19,230

many of you may have heard about this

1255

00:51:24,890 --> 00:51:22,320

story it dates back to September 2006 in

1256

00:51:27,290 --> 00:51:24,900

Queensland Australia but only came to

1257

00:51:29,390 --> 00:51:27,300

court this week and it deals with the

1258

00:51:31,610 --> 00:51:29,400

fate of an eleven-year-old girl who was

1259

00:51:33,580 --> 00:51:31,620

admitted to hospital two weeks after

1260

00:51:36,230 --> 00:51:33,590

contracting a serious heart infection

1261

00:51:39,260 --> 00:51:36,240

which manifested as a body temperature

1262

00:51:42,050 --> 00:51:39,270

of 42 degrees Celsius hallucinations

1263

00:51:43,790 --> 00:51:42,060

weakness and difficulty walking and the

1264

00:51:46,130 --> 00:51:43,800

girl who was described by the examining

1265

00:51:49,550 --> 00:51:46,140

doctor as sick as the sickest person

1266

00:51:51,650 --> 00:51:49,560

I've ever seen in 35 years underwent

1267

00:51:54,380 --> 00:51:51,660

emergency heart bypass and valve

1268

00:51:55,790 --> 00:51:54,390

replacement spent some time in a coma

1269

00:51:57,890 --> 00:51:55,800

due to bleeding on the brain and

1270

00:52:01,130 --> 00:51:57,900

remained in hospital for an entire year

1271

00:52:04,430 --> 00:52:01,140

and she now has brain damage uses a

1272

00:52:06,170 --> 00:52:04,440

wheelchair and has reduced vision so how

1273

00:52:08,750 --> 00:52:06,180

do we explain the rapid descent into

1274

00:52:10,750 --> 00:52:08,760

such terrible illness of a young and

1275

00:52:13,130 --> 00:52:10,760

previously healthy eleven-year-old girl

1276  
00:52:14,960 --> 00:52:13,140  
while according to the court proceedings

1277  
00:52:17,270 --> 00:52:14,970  
the girl's father reportedly had a

1278  
00:52:19,370 --> 00:52:17,280  
distrust of conventional medicine and

1279  
00:52:21,740 --> 00:52:19,380  
instead of seeking assistance from real

1280  
00:52:24,320 --> 00:52:21,750  
doctors he had been feeding his child

1281  
00:52:26,540 --> 00:52:24,330  
aglycone nutrient dietary supplement

1282  
00:52:29,210 --> 00:52:26,550  
which is manufactured and developed by

1283  
00:52:31,970 --> 00:52:29,220  
manitech incorporated and I'll get on to

1284  
00:52:33,560 --> 00:52:31,980  
these people in a little while now

1285  
00:52:35,990 --> 00:52:33,570  
according to a report tended by a

1286  
00:52:37,970 --> 00:52:36,000  
psychologist in court the fathers belief

1287  
00:52:41,180 --> 00:52:37,980  
in manitex supplements bordered on

1288  
00:52:43,220 --> 00:52:41,190

obsessive and also those reports cited

1289

00:52:45,410 --> 00:52:43,230

that he had an exaggerated view of his

1290

00:52:48,110 --> 00:52:45,420

own knowledge and ability about health

1291

00:52:49,520 --> 00:52:48,120

treatments now the court was also told

1292

00:52:52,100 --> 00:52:49,530

that when his daughter presented in

1293

00:52:53,900 --> 00:52:52,110

hospital her mouth was peeling black and

1294

00:52:56,270 --> 00:52:53,910

clogged from the administration of

1295

00:52:58,820 --> 00:52:56,280

extremely high doses of this manitech

1296

00:53:01,430 --> 00:52:58,830

supplement and as I mentioned earlier

1297

00:53:03,140 --> 00:53:01,440

even more tragically the father himself

1298

00:53:05,000 --> 00:53:03,150

suffered from impaired judgement since

1299

00:53:07,160 --> 00:53:05,010

he had received a brain injury several

1300

00:53:09,349 --> 00:53:07,170

years earlier so what about this

1301  
00:53:12,410 --> 00:53:09,359  
glyconutrients supplement and who are

1302  
00:53:14,210 --> 00:53:12,420  
these people manitech manitech

1303  
00:53:16,010 --> 00:53:14,220  
incorporated if you check their website

1304  
00:53:18,410 --> 00:53:16,020  
make a range of wellness products

1305  
00:53:20,630 --> 00:53:18,420  
including skincare growth essentials

1306  
00:53:23,180 --> 00:53:20,640  
performance nutrition weight loss

1307  
00:53:25,400 --> 00:53:23,190  
products but their signature product is

1308  
00:53:28,130 --> 00:53:25,410  
a glycoprotein dietary supplement known

1309  
00:53:29,809 --> 00:53:28,140  
as ambra toes and according to their

1310  
00:53:32,599 --> 00:53:29,819  
website it has been called the missing

1311  
00:53:34,550 --> 00:53:32,609  
link in human nutrition and are quote

1312  
00:53:36,140 --> 00:53:34,560  
allowing your cells to send and

1313  
00:53:38,300 --> 00:53:36,150

translate messages to each other

1314

00:53:41,480 --> 00:53:38,310

enabling them to communicate clearly and

1315

00:53:43,849 --> 00:53:41,490

operate efficiently and this as well

1316

00:53:46,490 --> 00:53:43,859

from their website help support your

1317

00:53:47,990 --> 00:53:46,500

body's immune system now this is all

1318

00:53:49,790 --> 00:53:48,000

marketing jargon designed to make it

1319

00:53:51,380 --> 00:53:49,800

sound like the next miracle cure so

1320

00:53:53,960 --> 00:53:51,390

let's look at the actual science of the

1321

00:53:55,370 --> 00:53:53,970

stuff what is in it well one of the

1322

00:53:57,819 --> 00:53:55,380

components in fact seventy eight percent

1323

00:54:01,280 --> 00:53:57,829

of the components of the tablet

1324

00:54:05,059 --> 00:54:01,290

Umberto's complex capsules is a product

1325

00:54:07,190 --> 00:54:05,069

known as aloe barbadensis and this aloe

1326  
00:54:08,809 --> 00:54:07,200  
vera gel comes from the leaves of aloe

1327  
00:54:11,599 --> 00:54:08,819  
barbadensis and it's been used for

1328  
00:54:14,569 --> 00:54:11,609  
centuries in folk medicine in fact in

1329  
00:54:16,720 --> 00:54:14,579  
2006 the group of stl in a paper

1330  
00:54:19,099 --> 00:54:16,730  
published in carbohydrate research

1331  
00:54:21,890 --> 00:54:19,109  
isolated the many components of this

1332  
00:54:24,220 --> 00:54:21,900  
aloe vera gel to determine which parts

1333  
00:54:27,099 --> 00:54:24,230  
actually had a therapeutic effect and

1334  
00:54:29,599 --> 00:54:27,109  
they reported that the processing and

1335  
00:54:32,329 --> 00:54:29,609  
conservation of this aloe vera gel is

1336  
00:54:34,819 --> 00:54:32,339  
critical in maintaining the active

1337  
00:54:36,500 --> 00:54:34,829  
ingredient stability they said that

1338  
00:54:38,660 --> 00:54:36,510

since poor storage results in the

1339

00:54:42,170 --> 00:54:38,670

breakdown of the potent compounds to

1340

00:54:44,450 --> 00:54:42,180

simple sugars and glucose and they said

1341

00:54:46,280 --> 00:54:44,460

and I quote therefore no reasonable

1342

00:54:49,190 --> 00:54:46,290

biological activity can be anticipated

1343

00:54:51,170 --> 00:54:49,200

from such a gel or products derived from

1344

00:54:54,050 --> 00:54:51,180

it if it's not maintained in this

1345

00:54:56,960 --> 00:54:54,060

special manner now one of the other

1346

00:54:59,780 --> 00:54:56,970

components in these Umberto's capsules

1347

00:55:01,819 --> 00:54:59,790

is called large bark and this stuff

1348

00:55:04,160 --> 00:55:01,829

actually can't be digested by the human

1349

00:55:07,579 --> 00:55:04,170

body so its main effect is to just give

1350

00:55:09,260 --> 00:55:07,589

you flatulence what fun so unlike

1351

00:55:11,210 --> 00:55:09,270

pharmaceutical medicines strict

1352

00:55:12,950 --> 00:55:11,220

regulations are not in place to

1353

00:55:14,589 --> 00:55:12,960

determine the exact composition of

1354

00:55:17,589 --> 00:55:14,599

alternative medicine products

1355

00:55:19,239 --> 00:55:17,599

in Australia so unless you yourself were

1356

00:55:20,799 --> 00:55:19,249

to take one of these tablets and do the

1357

00:55:23,650 --> 00:55:20,809

analysis there is no way of knowing

1358

00:55:25,630 --> 00:55:23,660

exactly how much or how conserved the

1359

00:55:27,670 --> 00:55:25,640

active ingredient remains in these pills

1360

00:55:30,160 --> 00:55:27,680

but then we've come to expect this from

1361

00:55:32,410 --> 00:55:30,170

alternative medicine haven't we but what

1362

00:55:34,620 --> 00:55:32,420

makes this case different is contained

1363

00:55:37,710 --> 00:55:34,630

in the history of manitech itself

1364

00:55:40,599 --> 00:55:37,720

earlier this year in the u.s. they lost

1365

00:55:44,200 --> 00:55:40,609

11.25 million dollar class action suit

1366

00:55:46,029 --> 00:55:44,210

in 2007 the Texas Attorney General

1367

00:55:48,069 --> 00:55:46,039

charged them with unlawful misleading

1368

00:55:50,349 --> 00:55:48,079

sales practices including making

1369

00:55:52,450 --> 00:55:50,359

exaggerated claims about the therapeutic

1370

00:55:56,140 --> 00:55:52,460

benefits of their dietary supplements as

1371

00:55:58,059 --> 00:55:56,150

a method to increase sales and documents

1372

00:56:00,460 --> 00:55:58,069

filed in the Travis County District

1373

00:56:02,859 --> 00:56:00,470

Court revealed that manitech scheme was

1374

00:56:05,109 --> 00:56:02,869

to exploit families including those

1375

00:56:07,930 --> 00:56:05,119

challenged by cancer down syndrome

1376

00:56:10,390 --> 00:56:07,940

cystic fibrosis and other serious

1377

00:56:12,640 --> 00:56:10,400

illnesses and if you do a Google search

1378

00:56:15,099 --> 00:56:12,650

for manitech you can find them cited on

1379

00:56:17,859 --> 00:56:15,109

various can watch websites and they even

1380

00:56:19,509 --> 00:56:17,869

have a scathing Wikipedia page even more

1381

00:56:22,209 --> 00:56:19,519

deceitful is their attempt to hijack

1382

00:56:26,170 --> 00:56:22,219

Nobel prize-winning science but in this

1383

00:56:28,150 --> 00:56:26,180

case they actually got it wrong in 1999

1384

00:56:30,849 --> 00:56:28,160

the nobel prize for physiology or

1385

00:56:33,509 --> 00:56:30,859

medicine was awarded to dr. gunther blow

1386

00:56:36,190 --> 00:56:33,519

bell for his work with glycoproteins

1387

00:56:38,289 --> 00:56:36,200

someone at manitech got a little bit

1388

00:56:42,069 --> 00:56:38,299

mixed up and changed the prize to the

1389

00:56:44,499 --> 00:56:42,079

nobel peace prize and the year to 1994

1390

00:56:46,989 --> 00:56:44,509

now thankfully the scientists involved

1391

00:56:48,670 --> 00:56:46,999

did not take this lying down and issued

1392

00:56:53,229 --> 00:56:48,680

manitech with a cease and desist notice

1393

00:56:55,479 --> 00:56:53,239

and on sep tember 13 2007 two respected

1394

00:56:57,519 --> 00:56:55,489

glycobiology authored a scathing

1395

00:57:01,209 --> 00:56:57,529

critique of manitech which was published

1396

00:57:03,099 --> 00:57:01,219

online for the journal glycobiology it

1397

00:57:05,019 --> 00:57:03,109

was subsequently withdrawn due to

1398

00:57:06,849 --> 00:57:05,029

complaints from the company but it has

1399

00:57:10,180 --> 00:57:06,859

since been republished in glycobiology

1400

00:57:12,160 --> 00:57:10,190

this year this scathing critique was

1401  
00:57:15,519 --> 00:57:12,170  
when the proverbial began to hit the fan

1402  
00:57:18,130 --> 00:57:15,529  
and on november the second 2007 another

1403  
00:57:19,690 --> 00:57:18,140  
critical analysis of manitex tactics was

1404  
00:57:22,420 --> 00:57:19,700  
published in the highly respected

1405  
00:57:23,890 --> 00:57:22,430  
peer-reviewed journal science and this

1406  
00:57:26,049 --> 00:57:23,900  
article detailed the company's

1407  
00:57:28,090 --> 00:57:26,059  
underhanded attempts to infiltrate the

1408  
00:57:30,040 --> 00:57:28,100  
legitimate scientific community

1409  
00:57:32,950 --> 00:57:30,050  
including the story of a retired

1410  
00:57:35,350 --> 00:57:32,960  
professor and manitech consultant who

1411  
00:57:38,050 --> 00:57:35,360  
modified the 2006 addition of a

1412  
00:57:40,630 --> 00:57:38,060  
respected science textbook known as

1413  
00:57:42,910 --> 00:57:40,640

Harper's Illustrated biochemistry to

1414

00:57:45,820 --> 00:57:42,920

suggest the benefits of glycan nutrient

1415

00:57:47,800 --> 00:57:45,830

supplements one of the eminent glyka

1416

00:57:51,550 --> 00:57:47,810

biologists involved in this action has

1417

00:57:53,620 --> 00:57:51,560

been cited as saying quote it's none of

1418

00:57:55,450 --> 00:57:53,630

our business as glycobiology if

1419

00:57:58,150 --> 00:57:55,460

nutraceutical companies want to sell

1420

00:58:00,070 --> 00:57:58,160

bark extract when they begin to tie it

1421

00:58:02,290 --> 00:58:00,080

to our discipline then it becomes a

1422

00:58:05,080 --> 00:58:02,300

problem so this is not to detract from

1423

00:58:07,060 --> 00:58:05,090

the tragedy of this sad event in court

1424

00:58:09,700 --> 00:58:07,070

on Tuesday in Australia the girl's

1425

00:58:11,830 --> 00:58:09,710

father pleaded guilty to one count of

1426  
00:58:14,980 --> 00:58:11,840  
grievous bodily harm and will serve six

1427  
00:58:16,690 --> 00:58:14,990  
months in jail whilst her mother was

1428  
00:58:18,790 --> 00:58:16,700  
sentenced to 12 months jail for child

1429  
00:58:21,220 --> 00:58:18,800  
cruelty but was immediately released on

1430  
00:58:23,200 --> 00:58:21,230  
bail the victims in this case are a

1431  
00:58:25,480 --> 00:58:23,210  
brain-damaged wheelchair-bound 11 year

1432  
00:58:28,720 --> 00:58:25,490  
old and a no doubt heartbroken brain

1433  
00:58:30,550 --> 00:58:28,730  
injured father meanwhile dr. Robert a

1434  
00:58:32,860 --> 00:58:30,560  
still not the chief scientific officer

1435  
00:58:36,270 --> 00:58:32,870  
and senior vice president of manitech

1436  
00:58:41,440 --> 00:58:36,280  
incorporated quietly collapse his us

1437  
00:58:43,180 --> 00:58:41,450  
311514 ein dollars annual wage with 23

1438  
00:58:45,400 --> 00:58:43,190

thousand four hundred dollars in bonuses

1439

00:58:47,650 --> 00:58:45,410

and I'll leave the final word with

1440

00:58:49,660 --> 00:58:47,660

manitech themselves if you visit their

1441

00:58:52,390 --> 00:58:49,670

website you'll find this disclaimer on

1442

00:58:54,790 --> 00:58:52,400

their products this product is not

1443

00:58:57,760 --> 00:58:54,800

intended to diagnose treat cure or

1444

00:59:00,010 --> 00:58:57,770

prevent any disease that says it all and

1445

00:59:02,140 --> 00:59:00,020

for all the relevant links and further

1446

00:59:04,930 --> 00:59:02,150

reading about this story please head to

1447

00:59:07,180 --> 00:59:04,940

skeptics on TV and click on the zone

1448

00:59:09,760 --> 00:59:07,190

blog to find my accompanying blog for

1449

00:59:19,999 --> 00:59:09,770

this story and until next time this has

1450

00:59:24,089 --> 00:59:22,589

hello my name is my koala and and

1451  
00:59:26,069 --> 00:59:24,099  
welcome to the roundup where I share

1452  
00:59:28,229 --> 00:59:26,079  
news and views will interest skeptics

1453  
00:59:30,390 --> 00:59:28,239  
humanists secularists and followers of

1454  
00:59:31,950 --> 00:59:30,400  
the flying spaghetti monster I must

1455  
00:59:32,999 --> 00:59:31,960  
admit I smoked when I heard the trial

1456  
00:59:34,710 --> 00:59:33,009  
for Wayne been two self-proclaimed

1457  
00:59:36,719 --> 00:59:34,720  
Messiah and cult leaders started this

1458  
00:59:38,670 --> 00:59:36,729  
month Australians might recall watching

1459  
00:59:40,650 --> 00:59:38,680  
a documentary earlier this year on four

1460  
00:59:42,900 --> 00:59:40,660  
corners about bent called the end of the

1461  
00:59:47,009 --> 00:59:42,910  
world cult let's listen to some wise

1462  
00:59:50,819 --> 00:59:47,019  
words from bent one day by myself was in

1463  
00:59:53,940 --> 00:59:50,829

my trailer and I sat down in my chair

1464

00:59:57,960 --> 00:59:53,950

just relaxing and there was nothing on

1465

01:00:02,589 --> 00:59:57,970

my mind in particular and then God said

1466

01:00:09,729 --> 01:00:02,599

to me you are Messiah

1467

01:00:13,509 --> 01:00:09,739

I am the embodiment of God I am divinity

1468

01:00:15,849 --> 01:00:13,519

and humanity combined like David Koresh

1469

01:00:17,650 --> 01:00:15,859

of burning blazing Waco Fame Wayne been

1470

01:00:20,920 --> 01:00:17,660

started out as a seventh-day Adventist

1471

01:00:22,420 --> 01:00:20,930

preacher bent the leader of the Lord our

1472

01:00:24,640 --> 01:00:22,430

righteousness church who believes he's

1473

01:00:26,499 --> 01:00:24,650

the second coming of Jesus is accused of

1474

01:00:28,809 --> 01:00:26,509

molesting children whom he says he was

1475

01:00:30,759 --> 01:00:28,819

only healing he was charged with lying

1476

01:00:33,370 --> 01:00:30,769

there good with two nude underage girls

1477

01:00:35,559 --> 01:00:33,380

one of the girls said bent a man in his

1478

01:00:37,930 --> 01:00:35,569

60s kissed her on the lips and breasts

1479

01:00:40,089 --> 01:00:37,940

naturally been said the encounter was a

1480

01:00:42,819 --> 01:00:40,099

religious experience not a sexual one

1481

01:00:44,140 --> 01:00:42,829

Jeff bent the son of wine band has said

1482

01:00:46,029 --> 01:00:44,150

his father did lay naked with the

1483

01:00:48,219 --> 01:00:46,039

children but said he's never had sexual

1484

01:00:50,019 --> 01:00:48,229

contact with minors at all ever he's

1485

01:00:52,120 --> 01:00:50,029

been very careful to protect and respect

1486

01:00:54,489 --> 01:00:52,130

people he's been with and who has

1487

01:00:56,410 --> 01:00:54,499

touched and held he compared the

1488

01:00:58,479 --> 01:00:56,420

practice of lying naked with teenagers

1489

01:01:00,249 --> 01:00:58,489

as something akin to a parent holding a

1490

01:01:02,829 --> 01:01:00,259

child and said it was something his

1491

01:01:04,509 --> 01:01:02,839

father was ordered to do by God Jeff

1492

01:01:06,489 --> 01:01:04,519

band also said that God ordered his

1493

01:01:09,160 --> 01:01:06,499

father to take his own wife as a

1494

01:01:10,719 --> 01:01:09,170

spiritual wife so they divorced since

1495

01:01:13,059 --> 01:01:10,729

Jeff believes his father to be the

1496

01:01:15,009 --> 01:01:13,069

Messiah this was a sacrifice who felt he

1497

01:01:16,359 --> 01:01:15,019

had to make for God then

1498

01:01:18,190 --> 01:01:16,369

melodramatically believes his

1499

01:01:20,019 --> 01:01:18,200

persecution will bring about the end of

1500

01:01:21,400 --> 01:01:20,029

the world and claims that the

1501

01:01:23,709 --> 01:01:21,410

investigations into his dubious

1502

01:01:26,019 --> 01:01:23,719

activities of course such things as the

1503

01:01:28,660 --> 01:01:26,029

crisis on Wall Street I wonder if Barack

1504

01:01:30,789 --> 01:01:28,670

Obama knows that when he was arrested in

1505

01:01:32,829 --> 01:01:30,799

May been said that he was stopped eating

1506

01:01:34,749 --> 01:01:32,839

since then he has been in and out of

1507

01:01:37,539 --> 01:01:34,759

jail and been doing some overly dramatic

1508

01:01:39,309 --> 01:01:37,549

and sporadic fasting it's possible the

1509

01:01:40,779 --> 01:01:39,319

space between the collarbone and a

1510

01:01:43,150 --> 01:01:40,789

girl's breasts could be the difference

1511

01:01:45,819 --> 01:01:43,160

between guilt or innocence for this cult

1512

01:01:47,349 --> 01:01:45,829

leader because bents defense lawyer has

1513

01:01:49,120 --> 01:01:47,359

said one of the girls involved in the

1514

01:01:50,499 --> 01:01:49,130

naked fraternizing told her in an

1515

01:01:52,660 --> 01:01:50,509

interview that the kissing happened

1516

01:01:55,109 --> 01:01:52,670

closer to her clavicle and not on her

1517

01:01:57,249 --> 01:01:55,119

breasts this may make all the difference

1518

01:01:58,839 --> 01:01:57,259

then said at one point he wouldn't

1519

01:02:00,579 --> 01:01:58,849

participate in the legal proceedings

1520

01:02:02,979 --> 01:02:00,589

because he believed he won't get a fair

1521

01:02:05,079 --> 01:02:02,989

trial however he has been silently

1522

01:02:07,150 --> 01:02:05,089

attending his hearing it's interesting

1523

01:02:09,130 --> 01:02:07,160

to note that a man who said he only

1524

01:02:15,079 --> 01:02:09,140

answers to God will soon have to answer

1525

01:02:20,279 --> 01:02:18,210

my second story also comes from the US

1526  
01:02:23,190 --> 01:02:20,289  
of A this story comes from the Lone Star

1527  
01:02:24,900 --> 01:02:23,200  
State Texas a judge sentenced to

1528  
01:02:26,759 --> 01:02:24,910  
religious sects elder to 30 years in

1529  
01:02:29,420 --> 01:02:26,769  
prison for molesting an eleven-year-old

1530  
01:02:32,609 --> 01:02:29,430  
girl during a phony cervical cancer exam

1531  
01:02:35,430 --> 01:02:32,619  
yet a dire Hawkins a house of Yahweh

1532  
01:02:36,990 --> 01:02:35,440  
elder faced a maximum penalty of life in

1533  
01:02:39,170 --> 01:02:37,000  
prison after being convicted of

1534  
01:02:41,759 --> 01:02:39,180  
aggravated sexual assault of a child

1535  
01:02:43,680 --> 01:02:41,769  
Hawkins has no medical training they

1536  
01:02:46,019 --> 01:02:43,690  
used a medical instrument to examine the

1537  
01:02:48,450 --> 01:02:46,029  
girl at a home in 2005 according to

1538  
01:02:50,130 --> 01:02:48,460

trial testimony a former house of the

1539

01:02:52,170 --> 01:02:50,140

our way member testified that Hawkins

1540

01:02:55,019 --> 01:02:52,180

actually was worried the girl was not a

1541

01:02:56,759 --> 01:02:55,029

virgin some defense witnesses testified

1542

01:02:58,460 --> 01:02:56,769

at the sentencing hearing that they

1543

01:03:00,900 --> 01:02:58,470

never saw Hawkins abused children

1544

01:03:03,450 --> 01:03:00,910

several became emotional and teary when

1545

01:03:05,549 --> 01:03:03,460

pleading for leniency Hawkins other

1546

01:03:08,160 --> 01:03:05,559

charges including aggravated perjury

1547

01:03:10,380 --> 01:03:08,170

indecent with a child and bigamy will

1548

01:03:12,599 --> 01:03:10,390

remain pending the sex leader

1549

01:03:14,700 --> 01:03:12,609

self-proclaimed prophet ezra Hawkins

1550

01:03:17,490 --> 01:03:14,710

faces trial next year on bigamy and

1551

01:03:19,950 --> 01:03:17,500

child labor charges is accused of having

1552

01:03:22,499 --> 01:03:19,960

more than 20 wives performing polygamous

1553

01:03:25,380 --> 01:03:22,509

weddings enforcing about 40 children to

1554

01:03:27,180 --> 01:03:25,390

work at his 44-acre compound you might

1555

01:03:29,009 --> 01:03:27,190

remember use rail Hawkins claimed the

1556

01:03:32,190 --> 01:03:29,019

world was going to face a nuclear war on

1557

01:03:35,430 --> 01:03:32,200

sep tember 12 2006 let's remember that

1558

01:03:39,630 --> 01:03:35,440

memorable prophecy don't forget write

1559

01:03:42,269 --> 01:03:39,640

down this date sep tember the 12 2006 no

1560

01:03:46,730 --> 01:03:42,279

killer wore yes prophecy shows that

1561

01:03:50,490 --> 01:03:46,740

nuclear war will start September the 12

1562

01:03:52,289 --> 01:03:50,500

2006 remarkably that doomsday scenario

1563

01:03:54,390 --> 01:03:52,299

didn't happen but the official website

1564

01:03:56,400 --> 01:03:54,400

of the house of Yahweh continues to

1565

01:03:58,950 --> 01:03:56,410

insist on the accuracy of its prophecy

1566

01:04:01,859 --> 01:03:58,960

they have since modified their teachings

1567

01:04:04,470 --> 01:04:01,869

by saying that September 12 2006 was

1568

01:04:06,210 --> 01:04:04,480

only the start of a nine-month period at

1569

01:04:09,420 --> 01:04:06,220

the end of that time the prophesized

1570

01:04:11,039 --> 01:04:09,430

nuclear war would start wrong again we

1571

01:04:13,049 --> 01:04:11,049

look forward to seeing what occurs to

1572

01:04:19,170 --> 01:04:13,059

this juby asst leader and how many other

1573

01:04:24,249 --> 01:04:21,880

hi this is Richard Saunders with a quick

1574

01:04:27,219 --> 01:04:24,259

message putting out the skeptic zone

1575

01:04:29,229 --> 01:04:27,229

every week is a great deal of fun we

1576

01:04:31,660 --> 01:04:29,239

really do it for the love of it but our

1577

01:04:34,779 --> 01:04:31,670

web space does cost a little bit of

1578

01:04:36,729 --> 01:04:34,789

money and other production costs to what

1579

01:04:39,910 --> 01:04:36,739

we're asking for is a donation of just

1580

01:04:42,189 --> 01:04:39,920

two dollars that's it two dollars and

1581

01:04:44,609 --> 01:04:42,199

only if you want to there's a donate

1582

01:04:48,069 --> 01:04:44,619

button on the skeptic zone homepage

1583

01:04:50,469 --> 01:04:48,079

www.mtv and if you like the show and

1584

01:05:01,239 --> 01:04:50,479

only if you want to your two dollars

1585

01:05:04,239 --> 01:05:01,249

will go a long way thanks very much join

1586

01:05:17,259 --> 01:05:04,249

us now for drinking skeptically in the

1587

01:05:18,640 --> 01:05:17,269

think tank cheers everybody welcome to

1588

01:05:21,160 --> 01:05:18,650

the think tank we're here at our

1589

01:05:26,439 --> 01:05:21,170

favorite Club conveniently located near

1590

01:05:29,140 --> 01:05:26,449

my place Wow how convenient with joining

1591

01:05:31,179 --> 01:05:29,150

meters yes sorry joining me today yeah

1592

01:05:34,929 --> 01:05:31,189

we have Amanda Rose hello Amanda hello

1593

01:05:37,870 --> 01:05:34,939

with a mouthful of chips Tiffany day hi

1594

01:05:40,390 --> 01:05:37,880

and Rachel done well hello everybody and

1595

01:05:44,589 --> 01:05:40,400

Tiffany a big formal welcome to the

1596

01:05:47,319 --> 01:05:44,599

skeptic zone thank you very much thank

1597

01:05:50,210 --> 01:05:47,329

you for having me I'm very excited now

1598

01:05:53,990 --> 01:05:50,220

it's come to my attention that the

1599

01:05:56,270 --> 01:05:54,000

the skeptics in Arizona the northern

1600

01:05:58,820 --> 01:05:56,280

Arizona skeptics have started their own

1601  
01:06:02,330 --> 01:05:58,830  
skeptics in the pub which we think is a

1602  
01:06:04,070 --> 01:06:02,340  
good idea that's a great idea and they

1603  
01:06:06,500 --> 01:06:04,080  
are apparently going to be meeting on

1604  
01:06:10,339 --> 01:06:06,510  
the twentieth of this month at the

1605  
01:06:13,250 --> 01:06:10,349  
Bigfoot barbecue at 7pm now I couldn't

1606  
01:06:15,200 --> 01:06:13,260  
imagine a Flagstaff in Flagstaff I

1607  
01:06:17,210 --> 01:06:15,210  
should say that in flakes up Arizona I

1608  
01:06:20,060 --> 01:06:17,220  
couldn't think of a better place the

1609  
01:06:25,190 --> 01:06:20,070  
Bigfoot things were the Bigfoot public

1610  
01:06:27,980 --> 01:06:25,200  
you the big saw a BBQ big coochie dancer

1611  
01:06:29,750 --> 01:06:27,990  
he doesn't look so Abby how do we know

1612  
01:06:41,070 --> 01:06:29,760  
about that Richard is because of amanda

1613  
01:06:41,080 --> 01:06:45,510

our destruction of fun

1614

01:06:52,300 --> 01:06:48,850

come to my mentioning Flagstaff last

1615

01:06:54,610 --> 01:06:52,310

week the organizer got in touch rises so

1616

01:06:57,250 --> 01:06:54,620

that was really good cool so people are

1617

01:06:59,880 --> 01:06:57,260

listening to the podcast surprisingly

1618

01:07:03,300 --> 01:06:59,890

enough okay so all your people in

1619

01:07:07,240 --> 01:07:03,310

Flagstaff you can go to the meetup com

1620

01:07:10,660 --> 01:07:07,250

look for the northern Arizona skeptics

1621

01:07:12,940 --> 01:07:10,670

or head along to the Bigfoot barbecue on

1622

01:07:15,000 --> 01:07:12,950

the twentieth of this month which is

1623

01:07:19,150 --> 01:07:15,010

about when this podcast goes up Morris

1624

01:07:21,340 --> 01:07:19,160

at 7pm and I wish I could go me too me

1625

01:07:23,770 --> 01:07:21,350

too and while we're shouting up to

1626  
01:07:26,230 --> 01:07:23,780  
people i'm going to shout out to a Jason

1627  
01:07:27,820 --> 01:07:26,240  
holder in Indiana thanks for listening

1628  
01:07:29,860 --> 01:07:27,830  
to the show Jason and thanks for giving

1629  
01:07:33,820 --> 01:07:29,870  
me a an encouraging message earlier

1630  
01:07:37,270 --> 01:07:33,830  
today Oh Jason thanks for listening now

1631  
01:07:38,710 --> 01:07:37,280  
dr. Rachel you are eager as ever to

1632  
01:07:41,710 --> 01:07:38,720  
impart your great wisdom and knowledge

1633  
01:07:43,810 --> 01:07:41,720  
suzl oh I've got a fantastic story about

1634  
01:07:45,029 --> 01:07:43,820  
Tom Cruise our favorite favorite

1635  
01:07:47,579 --> 01:07:45,039  
celebrity

1636  
01:07:51,390 --> 01:07:47,589  
don't we all love tompa love shampoo

1637  
01:07:54,329 --> 01:07:51,400  
he's just so great as me he apologized

1638  
01:07:55,919 --> 01:07:54,339

this week we to Matt Lauer and many of

1639

01:07:59,519 --> 01:07:55,929

you would know Matt Lauer is one of the

1640

01:08:01,620 --> 01:07:59,529

hosts on the today show in America he

1641

01:08:04,890 --> 01:08:01,630

apologized for criticizing brooke

1642

01:08:06,870 --> 01:08:04,900

shields back in 2005 after she had a

1643

01:08:09,479 --> 01:08:06,880

baby and she talked about how many

1644

01:08:12,179 --> 01:08:09,489

personnel depressions and as is the

1645

01:08:15,530 --> 01:08:12,189

belief of Scientologists and most of you

1646

01:08:18,329 --> 01:08:15,540

guys most relations wouldn't notice that

1647

01:08:21,440 --> 01:08:18,339

Scientologists don't believe in mental

1648

01:08:24,630 --> 01:08:21,450

illness or treatment by psychiatry or

1649

01:08:26,790 --> 01:08:24,640

pharmaceuticals for psychiatry and he

1650

01:08:27,990 --> 01:08:26,800

made a scathing criticism of brooke

1651

01:08:29,970 --> 01:08:28,000

shields saying that there's no such

1652

01:08:31,559 --> 01:08:29,980

thing as personnel depression she's just

1653

01:08:34,770 --> 01:08:31,569

making it up and she should just go and

1654

01:08:36,510 --> 01:08:34,780

get a hug kind of stuff anyway he he

1655

01:08:40,079 --> 01:08:36,520

hasn't appeared on The Today Show since

1656

01:08:41,400 --> 01:08:40,089

then but he appeared on Monday and to

1657

01:08:44,160 --> 01:08:41,410

sit with his first interview with Matt

1658

01:08:47,910 --> 01:08:44,170

Lauer and he actually made a semi

1659

01:08:49,740 --> 01:08:47,920

apology hmm he said and I quote in

1660

01:08:51,329 --> 01:08:49,750

looking at myself I thought man that

1661

01:08:53,010 --> 01:08:51,339

came across as arrogant that's one of

1662

01:08:56,280 --> 01:08:53,020

those things you go okay I could have

1663

01:08:57,750 --> 01:08:56,290

absolutely handled that better good all

1664

01:08:59,820 --> 01:08:57,760

right moving right along here's an

1665

01:09:01,980 --> 01:08:59,830

interesting one now I have a pre doubt a

1666

01:09:03,570 --> 01:09:01,990

picture here to show you all I showed

1667

01:09:05,790 --> 01:09:03,580

Tiffany a little earlier while we were

1668

01:09:09,840 --> 01:09:05,800

having them a big treat I'll act

1669

01:09:11,640 --> 01:09:09,850

surprised yo thank you she likes it now

1670

01:09:14,550 --> 01:09:11,650

Rachel you're a medical type person I

1671

01:09:17,130 --> 01:09:14,560

know that and Amanda you know a thing or

1672

01:09:20,430 --> 01:09:17,140

two know what what do you see there is

1673

01:09:21,599 --> 01:09:20,440

I'm holding for Jesus no it's Mary you

1674

01:09:24,329 --> 01:09:21,609

can see that straight away are you

1675

01:09:26,010 --> 01:09:24,339

better than me I wasn't married what I'm

1676

01:09:28,320 --> 01:09:26,020

holding up folks is actually the France

1677

01:09:30,690 --> 01:09:28,330

care but he'd in the brain is fair to

1678

01:09:32,940 --> 01:09:30,700

marry this is a brain scan of a lady

1679

01:09:35,220 --> 01:09:32,950

called Pamela lateral natural thank you

1680

01:09:36,960 --> 01:09:35,230

let Ramon and she's from Florida and

1681

01:09:40,410 --> 01:09:36,970

this is only just coming to news she had

1682

01:09:43,050 --> 01:09:40,420

a brain scan and she was saying that the

1683

01:09:44,940 --> 01:09:43,060

she was old apparently as a lot of

1684

01:09:46,620 --> 01:09:44,950

people in the states do find themselves

1685

01:09:48,990 --> 01:09:46,630

in the situation where there

1686

01:09:51,360 --> 01:09:49,000

they struggle to pay medical bills yes

1687

01:10:03,450 --> 01:09:51,370

those are their medical system lacking

1688

01:10:05,820 --> 01:10:03,460

in this country we is that your

1689

01:10:09,810 --> 01:10:05,830

Glaswegian no that's not my best time

1690

01:10:11,580 --> 01:10:09,820

here so I don't have to go anyway yes so

1691

01:10:14,100 --> 01:10:11,590

a lot of people do have trouble paying

1692

01:10:15,810 --> 01:10:14,110

medical bills in the United States so

1693

01:10:18,209 --> 01:10:15,820

she had a brain scan and lo and behold

1694

01:10:20,370 --> 01:10:18,219

as I hold it up here yes I can see a

1695

01:10:22,740 --> 01:10:20,380

figure of cloaked figure and it does

1696

01:10:24,840 --> 01:10:22,750

look like a Sith Lord it really does

1697

01:10:28,229 --> 01:10:24,850

it's peridot Leah but yes he doesn't

1698

01:10:29,820 --> 01:10:28,239

like legendary I was actually searching

1699

01:10:31,290 --> 01:10:29,830

for Jesus or Marik's I thought it's got

1700

01:10:33,270 --> 01:10:31,300

to be one of the two and I couldn't see

1701

01:10:36,350 --> 01:10:33,280

it thank you sir not until short

1702

01:10:39,930 --> 01:10:36,360

immediately actually I must admit I seat

1703

01:10:41,640 --> 01:10:39,940

variants I was looking at it right close

1704

01:10:44,479 --> 01:10:41,650

to my face can you see it now I can see

1705

01:10:48,479 --> 01:10:44,489

it now really yet oh and by the way

1706

01:10:50,910 --> 01:10:48,489

christmas is coming isn't it nice and

1707

01:10:52,470 --> 01:10:50,920

sweet still he's suing her I'm also

1708

01:10:54,360 --> 01:10:52,480

wearing a silly hat mrs. but you just

1709

01:10:57,220 --> 01:10:54,370

can't see it they put some photos I

1710

01:10:59,800 --> 01:10:57,230

hospital shall we

1711

01:11:01,510 --> 01:10:59,810

once again everyone I'm sorry to have to

1712

01:11:05,050 --> 01:11:01,520

announce this to you the world is going

1713

01:11:07,900 --> 01:11:05,060

to end Oh again again does this happen a

1714

01:11:09,790 --> 01:11:07,910

lot yeah last time was too traumatic now

1715

01:11:12,850 --> 01:11:09,800

it's happening again it is going to

1716

01:11:14,290 --> 01:11:12,860

happen again it's amazing the repair

1717

01:11:19,030 --> 01:11:14,300

mechanisms up to what that the world

1718

01:11:24,940 --> 01:11:19,040

seems to have it's from let me just see

1719

01:11:27,400 --> 01:11:24,950

it's leland Freeborn of parowan Utah and

1720

01:11:31,050 --> 01:11:27,410

he has a small group of followers known

1721

01:11:33,630 --> 01:11:31,060

as the para when profit

1722

01:11:35,850 --> 01:11:33,640

Master again that's my patience don't

1723

01:11:38,130 --> 01:11:35,860

put this in the podcast but neither do

1724

01:11:42,030 --> 01:11:38,140

they reach him neither do they are you

1725

01:11:45,150 --> 01:11:42,040

saying okay this comes from a gentleman

1726

01:11:48,480 --> 01:11:45,160

by the name of Leland Freeborn of Utah

1727

01:11:51,780 --> 01:11:48,490

and the US and he has a small group of

1728

01:11:56,370 --> 01:11:51,790

followers who call him the para one

1729

01:11:57,630 --> 01:11:56,380

prophet and he has decided that riots in

1730

01:11:59,880 --> 01:11:57,640

the United States will begin before

1731

01:12:01,860 --> 01:11:59,890

Christmas and this is a direct result of

1732

01:12:06,020 --> 01:12:01,870

barack obama winning the presidential

1733

01:12:08,310 --> 01:12:06,030

election obviously and the old line

1734

01:12:10,560 --> 01:12:08,320

Soviet guard will jump on the

1735

01:12:14,040 --> 01:12:10,570

opportunity and new purse killing a

1736

01:12:17,700 --> 01:12:14,050

hundred million people or more yeah so

1737

01:12:19,380 --> 01:12:17,710

oh the journalists los angeles times

1738

01:12:21,840 --> 01:12:19,390

reported by the name of peter king we

1739

01:12:24,090 --> 01:12:21,850

traveled to peter to ciety Freeborn time

1740

01:12:26,430 --> 01:12:24,100

to get some details about this and it

1741

01:12:30,490 --> 01:12:26,440

turns out and you'll all be surprised to

1742

01:12:33,430 --> 01:12:30,500

do this freeborn has predicted

1743

01:12:36,190 --> 01:12:33,440

you know end of the world things before

1744

01:12:40,150 --> 01:12:36,200

get out he wasn't wore off well they

1745

01:12:44,140 --> 01:12:40,160

didn't come true not really no no fur

1746

01:12:49,390 --> 01:12:44,150

but he's but he did say that um it's not

1747

01:12:51,730 --> 01:12:49,400

an exact science but he's actually

1748

01:12:54,100 --> 01:12:51,740

quoted in this article as a survivalist

1749

01:12:59,280 --> 01:12:54,110

who keeps iodine handy in order to ward

1750

01:13:03,430 --> 01:13:01,690

apparently yes this is going to happen

1751

01:13:05,800 --> 01:13:03,440

over Christmas and there's actually a

1752

01:13:07,870 --> 01:13:05,810

comment in here from Ben Radford who

1753

01:13:09,370 --> 01:13:07,880

most of us would know it was bet he was

1754

01:13:12,070 --> 01:13:09,380

interviewed on our show two weeks ago

1755

01:13:13,570 --> 01:13:12,080

yeah not two weeks ago and he says that

1756

01:13:16,330 --> 01:13:13,580

failed doomsday predictions are nothing

1757

01:13:17,950 --> 01:13:16,340

new there have been thousands of people

1758

01:13:20,500 --> 01:13:17,960

predicting the imminent end of the world

1759

01:13:22,170 --> 01:13:20,510

dating back to at least two thousand

1760

01:13:24,930 --> 01:13:22,180

eight hundred bc

1761

01:13:27,360 --> 01:13:24,940

I guess what we're still here barrel

1762

01:13:29,100 --> 01:13:27,370

roll that's right but of course as we

1763

01:13:31,080 --> 01:13:29,110

know from Tiffany earlier in the show

1764

01:13:33,450 --> 01:13:31,090

with a great review of death from the

1765

01:13:36,990 --> 01:13:33,460

skies the world's not going to end in a

1766

01:13:39,030 --> 01:13:37,000

puff of smoke caused by God's is it no

1767

01:13:41,310 --> 01:13:39,040

it's no it's not don't be so optimistic

1768

01:13:42,510 --> 01:13:41,320

Tiffany because apparently if you wake

1769

01:13:44,370 --> 01:13:42,520

up on Christmas Day and you're still

1770

01:13:46,950 --> 01:13:44,380

alive so for Australians that would be

1771

01:13:48,840 --> 01:13:46,960

about 17 hours later so we all die in

1772

01:13:51,900 --> 01:13:48,850

sequence it's already at the time yeah

1773

01:13:53,250 --> 01:13:51,910

well I guess if the nuclear attack make

1774

01:13:55,080 --> 01:13:53,260

repairs in the States it's going to take

1775

01:13:57,690 --> 01:13:55,090

a while to for the radioactive fallout

1776

01:14:02,250 --> 01:13:57,700

to come here right so we would die

1777

01:14:04,560 --> 01:14:02,260

earlier that is true no later yes later

1778

01:14:06,240 --> 01:14:04,570

because if we die on Chris happen there

1779

01:14:07,770 --> 01:14:06,250

on Christmas Day re bottom doing here by

1780

01:14:10,260 --> 01:14:07,780

the time the fallout register which will

1781

01:14:13,860 --> 01:14:10,270

be Christmas Day they're not everyone's

1782

01:14:15,600 --> 01:14:13,870

day their crimes 28 hours behind in some

1783

01:14:19,260 --> 01:14:15,610

parts of the states depending on where

1784

01:14:21,930 --> 01:14:19,270

you go 20 hours really 1720

1785

01:14:23,610 --> 01:14:21,940

ok we have attained on me sorry for you

1786

01:14:29,580 --> 01:14:23,620

listeners in the states to know you're

1787

01:14:32,070 --> 01:14:29,590

behind heavenly anyway in 2012 the whole

1788

01:14:34,020 --> 01:14:32,080

world is expected to end as opposed to

1789

01:14:36,930 --> 01:14:34,030

oh yeah well I don't know what's the

1790

01:14:40,200 --> 01:14:36,940

difference pedantic according to

1791

01:14:42,840 --> 01:14:40,210

hotlanta wayne bent he is the son of God

1792

01:14:44,970 --> 01:14:42,850

apparently but he is also predicted the

1793

01:14:48,570 --> 01:14:44,980

world was going to end previously about

1794

01:14:50,100 --> 01:14:48,580

a year ago but happy Christmas everyone

1795

01:14:52,830 --> 01:14:50,110

and make sure you get your presents

1796

01:14:55,650 --> 01:14:52,840

early because the world's gonna end yeah

1797

01:14:57,240 --> 01:14:55,660

happy christmas happy christmas happy

1798

01:15:00,810 --> 01:14:57,250

the world's going around here have been

1799

01:15:03,720 --> 01:15:00,820

questioned don't worry the statistics

1800

01:15:06,360 --> 01:15:03,730

show that is unlikely based on previous

1801

01:15:09,270 --> 01:15:06,370

results so glad to eat in the packet

1802

01:15:11,130 --> 01:15:09,280

science i'm very glad to you know it's

1803

01:15:13,380 --> 01:15:11,140

not just funny things that happen in the

1804

01:15:16,320 --> 01:15:13,390

United States at this time of the year

1805

01:15:18,840 --> 01:15:16,330

yeah something will happen down in a

1806

01:15:21,780 --> 01:15:18,850

suburb next to your place last week what

1807

01:15:23,580 --> 01:15:21,790

what'd you hear about this there was

1808

01:15:27,030 --> 01:15:23,590

some black magic glowing way did you

1809

01:15:29,940 --> 01:15:27,040

have anything to do with that tell me

1810

01:15:33,930 --> 01:15:29,950

more whoo okay well it actually happened

1811

01:15:35,370 --> 01:15:33,940

in between 2001 2005 but a woman has

1812

01:15:37,770 --> 01:15:35,380

been charged with aggravated sexual

1813

01:15:40,470 --> 01:15:37,780

assault for committing having social

1814

01:15:43,850 --> 01:15:40,480

intercourse without consent after posing

1815

01:15:46,790 --> 01:15:43,860

as a black magic feel

1816

01:15:49,040 --> 01:15:46,800

and this occurred in Sam Hill which is a

1817

01:15:52,070 --> 01:15:49,050

suburb Mitch next two most most of it

1818

01:15:54,650 --> 01:15:52,080

yeah your local train station it is yeah

1819

01:15:57,140 --> 01:15:54,660

okay so it was a husband and wife team

1820

01:15:59,600 --> 01:15:57,150

and they've been charged with 79

1821

01:16:02,960 --> 01:15:59,610

offenses in relation to one warm at work

1822

01:16:05,090 --> 01:16:02,970

and they would prearranged prayer

1823

01:16:10,090 --> 01:16:05,100

sessions at various motels and hotels

1824

01:16:11,900 --> 01:16:10,100

across Sydney and then commit sexual

1825

01:16:15,410 --> 01:16:11,910

intercourse with these people without

1826

01:16:17,720 --> 01:16:15,420

their consent of group that's right yeah

1827

01:16:19,820 --> 01:16:17,730

what was the pre-tax then where'd the

1828

01:16:23,000 --> 01:16:19,830

black man she coming yeah yeah I'm just

1829

01:16:25,520 --> 01:16:23,010

so they would face the women thought

1830

01:16:28,730 --> 01:16:25,530

that they were cursed that's right it

1831

01:16:31,520 --> 01:16:28,740

was it was a church group yeah and they

1832

01:16:33,350 --> 01:16:31,530

encouraged this idea that the women were

1833

01:16:37,430 --> 01:16:33,360

cursed

1834

01:16:40,669 --> 01:16:37,440

then offered their services to get rid

1835

01:16:43,010 --> 01:16:40,679

of the curse which involved allegedly

1836

01:16:45,979 --> 01:16:43,020

you know driving and allegedly of course

1837

01:16:48,109 --> 01:16:45,989

these sort of things and many thousands

1838

01:16:49,820 --> 01:16:48,119

of dollars as well for each well it says

1839

01:16:51,229 --> 01:16:49,830

here fifty thousand dollars from the

1840

01:16:54,859 --> 01:16:51,239

couple

1841

01:16:57,109 --> 01:16:54,869

with intent to steal it yeah so they've

1842

01:16:58,970 --> 01:16:57,119

appeared in court so I guess we'll find

1843

01:16:59,459 --> 01:16:58,980

out whether it's alleged or not be

1844

01:17:03,739 --> 01:16:59,469

pretty

1845

01:17:06,750 --> 01:17:03,749

what I wonder is why all the coup

1846

01:17:09,330 --> 01:17:06,760

legitimate psychics out there I know it

1847

01:17:13,109 --> 01:17:09,340

does give them a bad well yeah of course

1848

01:17:15,540 --> 01:17:13,119

now why aren't they forming vigilante

1849

01:17:17,879 --> 01:17:15,550

groups or protest groups or watch groups

1850

01:17:20,160 --> 01:17:17,889

to weed out the fakes in their industry

1851

01:17:23,129 --> 01:17:20,170

that's a really good point Richard why

1852

01:17:27,120 --> 01:17:23,139

don't they do it yeah that's a good

1853

01:17:30,569 --> 01:17:27,130

point soon because um oh sorry how could

1854

01:17:33,239 --> 01:17:30,579

you possibly tell the fakes he said

1855

01:17:36,149 --> 01:17:33,249

being facetious what are you inferring

1856

01:17:38,879 --> 01:17:36,159

rich in your pocket is real oh you're on

1857

01:17:43,549 --> 01:17:38,889

yours and mine is that's right he

1858

01:17:46,830 --> 01:17:43,559

doesn't yeah ah him yeah break you guys

1859

01:17:49,680 --> 01:17:46,840

know I wonder mm-hmm Ray had a rating

1860

01:17:51,569 --> 01:17:49,690

how do you know no I heard more ed I've

1861

01:17:53,489 --> 01:17:51,579

had ratings I've had more reading so

1862

01:17:54,899 --> 01:17:53,499

you've had hot dinners poking that's

1863

01:17:56,779 --> 01:17:54,909

what they know I know you're having

1864

01:17:59,250 --> 01:17:56,789

point but you know I've had readings

1865

01:18:01,169 --> 01:17:59,260

although my ones real how would you know

1866

01:18:03,450 --> 01:18:01,179

there's another comeback to that people

1867

01:18:05,250 --> 01:18:03,460

say how can you knock this person

1868

01:18:06,959 --> 01:18:05,260

without going to the mall whatever I say

1869

01:18:10,859 --> 01:18:06,969

well you know I don't have to visit the

1870

01:18:13,620 --> 01:18:10,869

South Pole to know it's cold aren't you

1871

01:18:17,189 --> 01:18:13,630

a smarty I am it must be that clever hat

1872

01:18:21,120 --> 01:18:17,199

you wear it is it good yeah nice to see

1873

01:18:22,229 --> 01:18:21,130

this mom or Richard before we go we're

1874

01:18:25,049 --> 01:18:22,239

going to mention the poll on the website

1875

01:18:27,750 --> 01:18:25,059

oh thank you dr. Rachel for reminding me

1876

01:18:30,390 --> 01:18:27,760

we're very interested listeners to know

1877

01:18:34,360 --> 01:18:30,400

how you found out about us and if you go

1878

01:18:37,990 --> 01:18:34,370

to our website [www.skepticzone](http://www.skepticzone.com)

1879

01:18:40,900 --> 01:18:38,000

and scroll down you'll find out Paul yes

1880

01:18:43,150 --> 01:18:40,910

with how did you find out about it was a

1881

01:18:45,850 --> 01:18:43,160

friend or is it a Google search or

1882

01:18:48,160 --> 01:18:45,860

advertising whatever so please run to

1883

01:18:50,200 --> 01:18:48,170

our website scroll down and click the

1884

01:18:52,060 --> 01:18:50,210

appropriate box and just tonight this is

1885

01:18:53,950 --> 01:18:52,070

you have to scroll down almost to the

1886

01:18:56,230 --> 01:18:53,960

bottom of the page to keep going it's on

1887

01:18:58,090 --> 01:18:56,240

the left hand side of the page and

1888

01:19:00,220 --> 01:18:58,100

you'll you'll see it when you get to the

1889

01:19:02,440 --> 01:19:00,230

bottom line 21 so if you could do that

1890

01:19:04,780 --> 01:19:02,450

it would help us and we would appreciate

1891

01:19:06,100 --> 01:19:04,790

that very much we were too because so

1892

01:19:08,980 --> 01:19:06,110

far just myself and Richard have

1893

01:19:11,110 --> 01:19:08,990

incident other people to it oh really I

1894

01:19:13,840 --> 01:19:11,120

didn't check it today we only just put

1895

01:19:15,700 --> 01:19:13,850

it up so from our favorite Club

1896

01:19:20,490 --> 01:19:15,710

conveniently located just down the road

1897

01:19:24,100 --> 01:19:20,500

from my place you had to come to tech

1898

01:19:27,280 --> 01:19:24,110

and the club that don't allow women with

1899

01:19:31,270 --> 01:19:27,290

phones in yeah oh hang on an angel

1900

01:19:35,860 --> 01:19:31,280

jealous ringing Mary okay we made every

1901

01:19:37,330 --> 01:19:35,870

min flip-flops shoes dollars yeah like

1902

01:19:40,840 --> 01:19:37,340

beach wit so when he turned up in a

1903

01:19:42,840 --> 01:19:40,850

thong and they wouldn't let him let me

1904

01:19:46,840 --> 01:19:42,850

in last time wearing thongs and I had

1905

01:19:49,600 --> 01:19:46,850

heels in my bag we good people in the US

1906

01:19:54,180 --> 01:19:49,610

Tiffany where's to thongs and amanda

1907

01:20:01,870 --> 01:19:58,240

Hahnville [h\_\_h] a contrasting colors she

1908

01:20:04,810 --> 01:20:01,880

does not that I know and listen his

1909

01:20:30,229 --> 01:20:04,820

uncle cuddle next year this has been the

1910

01:20:35,189 --> 01:20:32,060

Richard as an innocent bystander

1911

01:20:37,709 --> 01:20:35,199

listening to that show I can see now why

1912

01:20:39,720 --> 01:20:37,719

we number one I wear naman it's awesome

1913

01:20:41,970 --> 01:20:39,730

what a show thank you again to Pamela

1914

01:20:44,160 --> 01:20:41,980

gay I really appreciated her giving me

1915

01:20:47,160 --> 01:20:44,170

the time and as a thank you I send her a

1916

01:20:48,899 --> 01:20:47,170

copy of my origami DVD Oh lovely 3d

1917

01:20:53,089 --> 01:20:48,909

origami an excellent DVD which you

1918

01:20:58,109 --> 01:20:56,040

yeah nothing like a shameless plug or

1919

01:21:00,030 --> 01:20:58,119

nothing like James bike and a copy of my

1920

01:21:02,609 --> 01:21:00,040

good friend and our voiceover man Jamal

1921

01:21:04,919 --> 01:21:02,619

sure his latest poetry DVD oh yes I said

1922

01:21:07,350 --> 01:21:04,929

in a family guy excellent now listen is

1923

01:21:09,359 --> 01:21:07,360

also and i'm sure most of you know about

1924

01:21:10,979 --> 01:21:09,369

this there's a really great website we'd

1925

01:21:13,830 --> 01:21:10,989

like to talk about called what's the

1926

01:21:16,410 --> 01:21:13,840

harm dot net yeah what a sight that is a

1927

01:21:18,780 --> 01:21:16,420

sight when people ask you are yeah i

1928

01:21:21,149 --> 01:21:18,790

believe in sticking camels up my nose or

1929

01:21:22,800 --> 01:21:21,159

in my years yes the hammam you can go to

1930

01:21:25,589 --> 01:21:22,810

what's that I'm got then you find out

1931

01:21:27,209 --> 01:21:25,599

the quantifiable homes being done by all

1932

01:21:28,950 --> 01:21:27,219

these things it's excellent scuffle

1933

01:21:30,060 --> 01:21:28,960

sorts of things like numerology just

1934

01:21:31,350 --> 01:21:30,070

looking at site now yeah it's really

1935

01:21:34,320 --> 01:21:31,360

good people have actually been killed

1936

01:21:36,120 --> 01:21:34,330

within the infant schwa bench wash my

1937

01:21:38,520 --> 01:21:36,130

jammies thanks ray and all of the rest

1938

01:21:40,470 --> 01:21:38,530

of that stuff it's an excellent service

1939

01:21:42,930 --> 01:21:40,480

the harm net what's the harm net and

1940

01:21:45,660 --> 01:21:42,940

some a lot of lucky listeners out there

1941

01:21:47,729 --> 01:21:45,670

by now will be going to their post boxes

1942

01:21:49,649 --> 01:21:47,739

and getting the latest edition of the

1943

01:21:51,479 --> 01:21:49,659

Australian skeptics magazine the skeptic

1944

01:21:53,100 --> 01:21:51,489

yes which has just come out great bag

1945

01:21:54,839 --> 01:21:53,110

too late man lots of content in there

1946

01:21:56,669 --> 01:21:54,849

were a riveting read you have lots of

1947

01:21:58,229 --> 01:21:56,679

contributors and of course if you are

1948

01:22:02,040 --> 01:21:58,239

overseas you can visit the Australian

1949

01:22:04,830 --> 01:22:02,050

skeptics website which is [www text com](http://www.text.com)

1950

01:22:07,470 --> 01:22:04,840

au you can subscribe to the skeptic

1951

01:22:10,620 --> 01:22:07,480

magazine and in fact you can download

1952

01:22:12,629 --> 01:22:10,630

past issues issues that's right we are

1953

01:22:15,030 --> 01:22:12,639

nothing to hide we're here we given it

1954

01:22:16,979 --> 01:22:15,040

away so not a great show Richard that's

1955

01:22:18,419 --> 01:22:16,989

let's come back in a couple weeks time

1956

01:22:20,520 --> 01:22:18,429

yeah you and I'll be back in a couple of

1957

01:22:22,410 --> 01:22:20,530

weeks time in the new year in the new

1958

01:22:24,930 --> 01:22:22,420

year but as a christmas special on

1959

01:22:28,080 --> 01:22:24,940

Boxing Day which is the 26th of December

1960

01:22:30,149 --> 01:22:28,090

we have an interview with Derek and

1961

01:22:32,250 --> 01:22:30,159

swoopy from skeptic ality ah great

1962

01:22:34,260 --> 01:22:32,260

Campbell they are yes they're excellent

1963

01:22:36,540 --> 01:22:34,270

i will have a great Christmas thank yous

1964

01:22:40,240 --> 01:22:36,550

Devin will be listening on Boxing Day by

1965

01:22:46,640 --> 01:22:42,650

you've been listening to the skeptic

1966

01:22:50,420 --> 01:22:46,650

zone visit our website at [www.skeptics](http://www.skeptics)

1967

01:22:53,620 --> 01:22:50,430

on TV for comments contacts and extra

1968

01:23:04,580 --> 01:22:55,930

skin