

**SKEPTIC
ZONE**



THINKING CAPS
MUST BE WORN
IN THIS AREA

The
Podcast
from
Australia
for
Science
and
Reason

www.skepticzone.tv

1
00:00:05,660 --> 00:00:02,419
you're listening to skip tide I'm Brian

2
00:00:15,289 --> 00:00:05,670
Dunning from sceptile calm was Chuck

3
00:00:23,500 --> 00:00:15,299
Yeager fool oops sorry about that um no

4
00:00:23,510 --> 00:00:30,270
change

5
00:00:30,280 --> 00:00:37,819
Oh

6
00:00:44,520 --> 00:00:40,740
welcome to the skeptic zone show number

7
00:00:47,459 --> 00:00:44,530
32 for the 29th of May Richard Saunders

8
00:00:49,229 --> 00:00:47,469
with you a bit of a short show this week

9
00:00:51,660 --> 00:00:49,239
I'm flying down to Melbourne together

10
00:00:54,660 --> 00:00:51,670
with dr. Rachel Kylie Sturgis and Dave

11
00:00:56,130 --> 00:00:54,670
the happy singer to give some talk so we

12
00:00:58,500 --> 00:00:56,140
haven't got much time foot to give her a

13
00:01:01,469 --> 00:00:58,510

show however I did manage to catch up

14

00:01:05,249 --> 00:01:01,479

with Mario shot lander otherwise known

15

00:01:09,330 --> 00:01:05,259

as muy poo for an interview so sit back

16

00:01:24,960 --> 00:01:09,340

relax have a cup of tea and enjoy my

17

00:01:31,780 --> 00:01:27,990

mari el shot lander from New York

18

00:01:34,539 --> 00:01:31,790

otherwise known as muy poo is a physics

19

00:01:37,389 --> 00:01:34,549

student with a passion for space and

20

00:01:39,789 --> 00:01:37,399

astronomy in fact she wants to be the

21

00:01:42,850 --> 00:01:39,799

first woman to land on the moon and I'm

22

00:01:52,179 --> 00:01:42,860

sure she will be too I spoke with mari

23

00:01:54,520 --> 00:01:52,189

el a few days ago from Queens and we're

24

00:01:56,350 --> 00:01:54,530

talking with mari el right now on the

25

00:02:00,399 --> 00:01:56,360

line from new york city new york city

26

00:02:02,760 --> 00:02:00,409

isn't it Morial it is it is actually at

27

00:02:05,590 --> 00:02:02,770

Queens but that's still New York City

28

00:02:07,300 --> 00:02:05,600

Queens in New York City fantastic I've

29

00:02:10,300 --> 00:02:07,310

never been to New York I'd love to come

30

00:02:12,039 --> 00:02:10,310

and visit you should I sure and it's

31

00:02:14,949 --> 00:02:12,049

starting the summer now so it's very

32

00:02:18,280 --> 00:02:14,959

good weather fantastic now you've had a

33

00:02:20,020 --> 00:02:18,290

very interesting career in on the

34

00:02:22,449 --> 00:02:20,030

internet and in skepticism but you

35

00:02:23,860 --> 00:02:22,459

haven't been really around or active for

36

00:02:25,990 --> 00:02:23,870

too long but you've certainly made an

37

00:02:28,690 --> 00:02:26,000

impact when did you really get started

38

00:02:32,620 --> 00:02:28,700

with your adventures into science in the

39

00:02:37,500 --> 00:02:32,630

internet actually quite a long time ago

40

00:02:40,360 --> 00:02:37,510

but I started in YouTube I started with

41

00:02:44,380 --> 00:02:40,370

video debates on YouTube there were

42

00:02:46,569 --> 00:02:44,390

questions asked and answered and then I

43

00:02:48,910 --> 00:02:46,579

saw that there's a lot of interest in a

44

00:02:51,849 --> 00:02:48,920

lot of people that have questions about

45

00:02:55,539 --> 00:02:51,859

science or scientific subjects and not a

46

00:02:57,819 --> 00:02:55,549

lot of them that really get answered and

47

00:03:02,229 --> 00:02:57,829

I took that as a challenge and I started

48

00:03:03,550 --> 00:03:02,239

putting up astronomy videos and I saw

49

00:03:06,940 --> 00:03:03,560

that there's there's actually a lot of

50

00:03:09,699 --> 00:03:06,950

interest and I was positively surprised

51
00:03:13,080 --> 00:03:09,709
and I decided to take it step further

52
00:03:15,789 --> 00:03:13,090
and I started smarter than that which is

53
00:03:19,170 --> 00:03:15,799
the experiment website it's a

54
00:03:22,390 --> 00:03:19,180
do-it-yourself experiments on YouTube

55
00:03:24,759 --> 00:03:22,400
with an accompanying site to explain all

56
00:03:26,620 --> 00:03:24,769
the experiments and to show how you can

57
00:03:29,410 --> 00:03:26,630
do it at home and those experiments show

58
00:03:31,750 --> 00:03:29,420
you scientific phenomena that you can

59
00:03:34,000 --> 00:03:31,760
you can see for yourself not not you

60
00:03:36,770 --> 00:03:34,010
know research or store

61
00:03:39,170 --> 00:03:36,780
believe the scientists that you've never

62
00:03:42,890 --> 00:03:39,180
met before you don't know just do it

63
00:03:45,080 --> 00:03:42,900

yourself see for yourself and learn yeah

64

00:03:47,120 --> 00:03:45,090

now I became hooked on those videos

65

00:03:48,710 --> 00:03:47,130

because I loved the one where you

66

00:03:50,300 --> 00:03:48,720

explain the speed of light in the

67

00:03:53,210 --> 00:03:50,310

microwave and then that was all very

68

00:03:55,400 --> 00:03:53,220

funny and then I couldn't believe my

69

00:03:58,670 --> 00:03:55,410

eyes you were sort of almost half naked

70

00:04:01,130 --> 00:03:58,680

in the bath can you explain that one all

71

00:04:04,940 --> 00:04:01,140

right actually it was it was the first

72

00:04:08,630 --> 00:04:04,950

meant as a as a like a joke because I

73

00:04:11,300 --> 00:04:08,640

wasn't at all naked um like oh you've

74

00:04:13,400 --> 00:04:11,310

spoiled it now I was no I know I'm sorry

75

00:04:17,960 --> 00:04:13,410

to disappoint I was almost naked though

76

00:04:19,550 --> 00:04:17,970

if that helps oh thank you but um i was

77

00:04:22,130 --> 00:04:19,560

i was actually filming this with my

78

00:04:23,930 --> 00:04:22,140

roommate at the time and i started

79

00:04:25,760 --> 00:04:23,940

explaining and she had a lot of

80

00:04:27,050 --> 00:04:25,770

questions in the middle of the video and

81

00:04:28,940 --> 00:04:27,060

it took me a while to explain to her

82

00:04:31,310 --> 00:04:28,950

that I don't mind explaining but in

83

00:04:34,640 --> 00:04:31,320

order for me to actually film this she

84

00:04:37,490 --> 00:04:34,650

needs to be quiet and if you listen very

85

00:04:40,270 --> 00:04:37,500

carefully you can hear her giggle in the

86

00:04:42,500 --> 00:04:40,280

background and so as we were filming

87

00:04:46,070 --> 00:04:42,510

there were more and more bubbles because

88

00:04:48,410 --> 00:04:46,080

we just had so many takes filming this

89

00:04:49,550 --> 00:04:48,420

while she was trying not to laugh that

90

00:04:51,230 --> 00:04:49,560

there were so many bubbles that I

91

00:04:57,740 --> 00:04:51,240

started just covering myself but he just

92

00:04:59,840 --> 00:04:57,750

created a very nice the effect yes yes I

93

00:05:02,000 --> 00:04:59,850

guess that I think that worked very well

94

00:05:03,890 --> 00:05:02,010

because it's like did she did she really

95

00:05:05,660 --> 00:05:03,900

go half naked in the bath to make this

96

00:05:07,700 --> 00:05:05,670

video or I'm not sure that would that I

97

00:05:09,200 --> 00:05:07,710

thought that was very cute you know but

98

00:05:11,480 --> 00:05:09,210

that's that's one of the reasons that I

99

00:05:13,640 --> 00:05:11,490

that I started the other project that

100

00:05:16,250 --> 00:05:13,650

I'm that I started recently smart acts

101
00:05:22,850 --> 00:05:16,260
calm which by the way it's an ex with an

102
00:05:25,190 --> 00:05:22,860
e at the end so SM a RT a XE right right

103
00:05:26,560 --> 00:05:25,200
I wanted to take small acts without an e

104
00:05:32,540 --> 00:05:26,570
but apparently it's some sort of

105
00:05:34,580 --> 00:05:32,550
medicine oh yes and I yeah it kind of

106
00:05:37,190 --> 00:05:34,590
sounds like a medicine too so I didn't

107
00:05:38,750 --> 00:05:37,200
want to go there but only later I

108
00:05:43,400 --> 00:05:38,760
learned that you can actually spell it

109
00:05:46,159 --> 00:05:43,410
without an e so yeah yeah also recently

110
00:05:47,750 --> 00:05:46,169
we started with in small X with a new

111
00:05:51,140 --> 00:05:47,760
project on Twitter called

112
00:05:54,520 --> 00:05:51,150
ask tirana me where we have a few

113
00:05:57,860 --> 00:05:54,530

experts in astronomy knowledgeable

114

00:06:00,680 --> 00:05:57,870

amateurs or actual experts who will

115

00:06:03,890 --> 00:06:00,690

answer your question and Twitter if you

116

00:06:09,110 --> 00:06:03,900

use the hashtag ask Tirana me which is a

117

00:06:11,600 --> 00:06:09,120

sk TR 0 and oh my so just do that and

118

00:06:14,180 --> 00:06:11,610

get your answers and participate in a

119

00:06:16,490 --> 00:06:14,190

debate about astronomy and if people

120

00:06:18,860 --> 00:06:16,500

want to follow you personally on Twitter

121

00:06:22,490 --> 00:06:18,870

what's your twitter name my twitter name

122

00:06:23,960 --> 00:06:22,500

is muy poo and the more than welcome to

123

00:06:26,780 --> 00:06:23,970

ask me questions and approach me there

124

00:06:34,490 --> 00:06:26,790

and follow me movie poof and that spelt

125

00:06:38,230 --> 00:06:34,500

m 0 0 ey P oh oh alright but that's

126
00:06:41,150 --> 00:06:38,240
that's one of the reasons that this bath

127
00:06:42,980 --> 00:06:41,160
video that I decided also to go for that

128
00:06:46,190 --> 00:06:42,990
project because I saw that the reaction

129
00:06:48,530 --> 00:06:46,200
for that video for the Doppler effect

130
00:06:52,120 --> 00:06:48,540
video where I'm in the I'm starting it

131
00:06:56,900 --> 00:06:52,130
in the bathtub and I'm I appeared to be

132
00:07:00,580 --> 00:06:56,910
naked the reactions were suddenly good

133
00:07:02,990 --> 00:07:00,590
from two levels first the the usual

134
00:07:05,630 --> 00:07:03,000
target audience that is more you know

135
00:07:08,720 --> 00:07:05,640
kid friendly people really enjoy that I

136
00:07:11,330 --> 00:07:08,730
got a lot of emails from teachers that

137
00:07:13,190 --> 00:07:11,340
enjoyed the experiment and enjoyed you

138
00:07:15,410 --> 00:07:13,200

know the the demonstration but then I

139

00:07:18,500 --> 00:07:15,420

also got you know messages from just

140

00:07:21,170 --> 00:07:18,510

random people who saw me in the you know

141

00:07:22,790 --> 00:07:21,180

saw the beginning of the video and

142

00:07:24,500 --> 00:07:22,800

thought it was really funny and then

143

00:07:26,360 --> 00:07:24,510

just continued watching and got the

144

00:07:29,210 --> 00:07:26,370

science of it as you know in the back

145

00:07:30,800 --> 00:07:29,220

door yes and and I thought it was really

146

00:07:32,810 --> 00:07:30,810

cool and I thought you know what this is

147

00:07:34,490 --> 00:07:32,820

this is a great opportunity to take

148

00:07:38,000 --> 00:07:34,500

advantage of a target audience that is

149

00:07:40,640 --> 00:07:38,010

usually hard to to you know to get to

150

00:07:43,940 --> 00:07:40,650

because those are usually people who you

151

00:07:45,560 --> 00:07:43,950

know don't don't naturally go to the

152

00:07:49,190 --> 00:07:45,570

science stuff think that the science

153

00:07:51,980 --> 00:07:49,200

stuff is nerdy argue yes yes yes and

154

00:07:55,760 --> 00:07:51,990

then I but of course you really want my

155

00:07:58,730 --> 00:07:55,770

heart with the little duckies in the

156

00:08:01,190 --> 00:07:58,740

bath and the mommy ducky and yes yeah

157

00:08:03,890 --> 00:08:01,200

which is I think it the line

158

00:08:06,110 --> 00:08:03,900

for way to to do the science experiments

159

00:08:08,750 --> 00:08:06,120

what other videos did you put out there

160

00:08:13,820 --> 00:08:08,760

well recently I put one about a weight

161

00:08:15,650 --> 00:08:13,830

and mass hmm which which is funny

162

00:08:18,530 --> 00:08:15,660

because I already have one video about

163

00:08:20,630 --> 00:08:18,540

that but it's not exactly it's it's

164

00:08:23,120 --> 00:08:20,640

nothing bad nothing too bad but it's not

165

00:08:24,770 --> 00:08:23,130

kid friendly and I wanted to add

166

00:08:26,300 --> 00:08:24,780

something that is kid-friendly because

167

00:08:28,870 --> 00:08:26,310

this is you know that there are many

168

00:08:33,950 --> 00:08:28,880

misconceptions are with weight and mass

169

00:08:38,020 --> 00:08:33,960

that started a young age and so I put it

170

00:08:40,909 --> 00:08:38,030

up recently and I used the analogy of

171

00:08:43,790 --> 00:08:40,919

you know space travel of orbit where you

172

00:08:45,800 --> 00:08:43,800

are weightless but you still have mass

173

00:08:48,860 --> 00:08:45,810

you still have the same mass but your

174

00:08:50,810 --> 00:08:48,870

weight varies depending on on well if

175

00:08:58,249 --> 00:08:50,820

you're on the Moon or Mars or earth or

176

00:09:04,729 --> 00:09:01,189

listen up fitness fans it's physics time

177

00:09:06,949 --> 00:09:04,739

weight is not the same as mass mass

178

00:09:10,159 --> 00:09:06,959

loosely speaking is the amount of matter

179

00:09:13,039 --> 00:09:10,169

in an object weight is the force that

180

00:09:16,159 --> 00:09:13,049

the object is exerting on the ground we

181

00:09:18,650 --> 00:09:16,169

measure that force using a scale weight

182

00:09:21,199 --> 00:09:18,660

is a multiplication of your mass and the

183

00:09:23,749 --> 00:09:21,209

force of gravity if you increase or

184

00:09:26,239 --> 00:09:23,759

decrease any of these variables your way

185

00:09:28,609 --> 00:09:26,249

to the changes accordingly the moon's

186

00:09:30,799 --> 00:09:28,619

gravity is one-sixth of that of the

187

00:09:32,449 --> 00:09:30,809

Earth's if you land on the moon you will

188

00:09:36,529 --> 00:09:32,459

weigh six times less than you do on

189

00:09:39,559 --> 00:09:36,539

earth but your mass remains the same the

190

00:09:42,559 --> 00:09:39,569

particles that make you you didn't go

191

00:09:44,749 --> 00:09:42,569

anywhere your scale will show a six of

192

00:09:46,879 --> 00:09:44,759

your original weight on earth if your

193

00:09:49,669 --> 00:09:46,889

goal is to lose weight when you just

194

00:09:51,919 --> 00:09:49,679

achieved it but you can also reduce your

195

00:09:54,769 --> 00:09:51,929

weight without reducing your mass here

196

00:09:56,599 --> 00:09:54,779

on earth for example any time you go

197

00:09:58,999 --> 00:09:56,609

down an elevator in a tall building you

198

00:10:01,069 --> 00:09:59,009

are losing weight while the elevator is

199

00:10:03,439 --> 00:10:01,079

accelerating it is moving away from your

200

00:10:05,359 --> 00:10:03,449

feet and you are essentially falling

201
00:10:07,609 --> 00:10:05,369
when you go up a tall building the

202
00:10:09,139 --> 00:10:07,619
elevators acceleration is upwards and

203
00:10:11,239 --> 00:10:09,149
you're pressed strongly against the

204
00:10:13,489 --> 00:10:11,249
floor a situation that increases your

205
00:10:15,409 --> 00:10:13,499
weight quite a few amusement park rides

206
00:10:18,559 --> 00:10:15,419
use these principles to get your guts

207
00:10:20,359 --> 00:10:18,569
churning but everyone knows that the

208
00:10:23,029 --> 00:10:20,369
best way to lose weight is to exercise

209
00:10:25,249 --> 00:10:23,039
and eat right that is true only because

210
00:10:27,439 --> 00:10:25,259
exercise and nutrition will help you get

211
00:10:30,199 --> 00:10:27,449
rid of the massive fat in your body and

212
00:10:32,900 --> 00:10:30,209
by that decrease your weight when you

213
00:10:35,569 --> 00:10:32,910

exercise your body burns fat and builds

214

00:10:37,970 --> 00:10:35,579

muscle muscles are denser than fat and

215

00:10:39,799 --> 00:10:37,980

have more mass per unit volume that's

216

00:10:41,479 --> 00:10:39,809

why it is typical to gain a bit of

217

00:10:43,579 --> 00:10:41,489

weight if your weight loss routine

218

00:10:46,429 --> 00:10:43,589

includes a building muscle you replace

219

00:10:49,669 --> 00:10:46,439

the lighter massive fat with a denser

220

00:10:53,149 --> 00:10:49,679

and heavier mass of muscle your goal is

221

00:10:55,669 --> 00:10:53,159

to lose the fat hence to lose mass the

222

00:10:58,399 --> 00:10:55,679

result is that the scale is telling you

223

00:11:00,530 --> 00:10:58,409

that your weight is smaller and weight

224

00:11:02,660 --> 00:11:00,540

is not the same as mass

225

00:11:04,730 --> 00:11:02,670

the term weight loss is so ingrained in

226

00:11:06,920 --> 00:11:04,740

our society that it will be futile of me

227

00:11:08,960 --> 00:11:06,930

to try and get you to stop using it that

228

00:11:10,460 --> 00:11:08,970

does not mean however that you can't

229

00:11:13,820 --> 00:11:10,470

understand the physics behind those

230

00:11:15,830 --> 00:11:13,830

terms so remember if your goal is to

231

00:11:17,720 --> 00:11:15,840

lose weight write down an elevator or

232

00:11:21,050 --> 00:11:17,730

jump off a plane with a parachute if

233

00:11:23,060 --> 00:11:21,060

your goal is to be leaner exercise and

234

00:11:24,590 --> 00:11:23,070

eat right and get rid of that massive

235

00:11:26,900 --> 00:11:24,600

fat that surrounds your muscles

236

00:11:28,760 --> 00:11:26,910

alternatively you can go live on the

237

00:11:35,630 --> 00:11:28,770

International Space Station where weight

238

00:11:37,190 --> 00:11:35,640

is not really an issue you know I go to

239

00:11:38,570 --> 00:11:37,200

the gym and there are a lot of people

240

00:11:40,610 --> 00:11:38,580

who you know talk about losing weight

241

00:11:41,930 --> 00:11:40,620

and I always say well you know what if

242

00:11:43,640 --> 00:11:41,940

you want to lose weight jump off an

243

00:11:46,550 --> 00:11:43,650

airplane with a parachute that's a great

244

00:11:49,160 --> 00:11:46,560

way of losing weight but the goal you

245

00:11:51,290 --> 00:11:49,170

know is to lose the fat the the the mass

246

00:11:52,730 --> 00:11:51,300

of fat so that's different you know

247

00:11:56,600 --> 00:11:52,740

different thing altogether so that's a

248

00:11:59,330 --> 00:11:56,610

the the recent video i put up i'm hoping

249

00:12:01,790 --> 00:11:59,340

to put up a little bit more now that I'm

250

00:12:06,110 --> 00:12:01,800

no longer in a semester for a little

251
00:12:08,300 --> 00:12:06,120
while I'm not sure what about yet I have

252
00:12:10,310 --> 00:12:08,310
a few ideas oh I'm sure I'll listeners

253
00:12:14,810 --> 00:12:10,320
consent send you some ideas but I think

254
00:12:17,030 --> 00:12:14,820
what would I enjoyed so much was meeting

255
00:12:21,260 --> 00:12:17,040
you for the first time at last year's

256
00:12:23,510 --> 00:12:21,270
amazing meeting tam six and I remember I

257
00:12:24,980 --> 00:12:23,520
was jet-lagged out of my brain but I was

258
00:12:27,140 --> 00:12:24,990
going up an escalator and you were

259
00:12:29,240 --> 00:12:27,150
coming down to dinner or lunch or who

260
00:12:31,520 --> 00:12:29,250
knows what it was they were oh my

261
00:12:32,750 --> 00:12:31,530
goodness me it's muy poo and then the

262
00:12:35,570 --> 00:12:32,760
next thing I know you're dragging me

263
00:12:38,390 --> 00:12:35,580

outside to shovel a cream pie in my face

264

00:12:42,080 --> 00:12:38,400

oh that was the highlight of time I

265

00:12:44,240 --> 00:12:42,090

think it was for me but but it was all

266

00:12:46,340 --> 00:12:44,250

for science and it was great we actually

267

00:12:48,560 --> 00:12:46,350

proved a few things there and can you

268

00:12:51,560 --> 00:12:48,570

let our listeners know exactly why why

269

00:12:53,480 --> 00:12:51,570

you did in fact shove two in

270

00:12:55,700 --> 00:12:53,490

my face in fact do I really need to

271

00:12:58,670 --> 00:12:55,710

explain I don't you do you typically I

272

00:13:00,500 --> 00:12:58,680

mean yes well I mean everyone wants to

273

00:13:03,650 --> 00:13:00,510

shove into my face but you did

274

00:13:07,430 --> 00:13:03,660

it for science exactly and um yes well

275

00:13:12,470 --> 00:13:07,440

that was the excuse anyways we wanted to

276

00:13:14,300 --> 00:13:12,480

see what what goes on when you transfer

277

00:13:18,230 --> 00:13:14,310

a three-dimensional

278

00:13:22,670 --> 00:13:18,240

body like your face for in that example

279

00:13:25,370 --> 00:13:22,680

onto a two-dimensional plane like a page

280

00:13:28,760 --> 00:13:25,380

and we wanted to show that in order to

281

00:13:31,700 --> 00:13:28,770

show really that things like a shroud of

282

00:13:36,110 --> 00:13:31,710

turin where you look at a piece of cloth

283

00:13:38,300 --> 00:13:36,120

and you see an actual face as if like it

284

00:13:40,700 --> 00:13:38,310

doesn't look distorted it looks as if

285

00:13:42,500 --> 00:13:40,710

you took a picture of someone and we

286

00:13:44,360 --> 00:13:42,510

wanted to see if if that's logical if

287

00:13:47,990 --> 00:13:44,370

that's something that you know if this

288

00:13:52,310 --> 00:13:48,000

shroud really did cover someone's face

289

00:13:57,800 --> 00:13:52,320

and then we peel it off would we see a

290

00:14:01,690 --> 00:13:57,810

normal face so we use the cream on your

291

00:14:05,840 --> 00:14:01,700

face and then with a piece of paper and

292

00:14:08,269 --> 00:14:05,850

we saw that it was very amusing but it

293

00:14:10,970 --> 00:14:08,279

didn't look like you really it was very

294

00:14:13,190 --> 00:14:10,980

amusing I remember course it was a las

295

00:14:15,170 --> 00:14:13,200

vegas in the middle of summer we stepped

296

00:14:17,570 --> 00:14:15,180

outside to do this and by the time you

297

00:14:20,450 --> 00:14:17,580

squash the cream which is really whipped

298

00:14:22,310 --> 00:14:20,460

cream on plates into my face it wasn't

299

00:14:27,100 --> 00:14:22,320

very long before they all began to melt

300

00:14:30,710 --> 00:14:27,110

and yeah that was outfit it was it was I

301
00:14:33,890 --> 00:14:30,720
yeah I commend you for your effort to

302
00:14:35,750 --> 00:14:33,900
science Oh anything besides if our

303
00:14:37,520 --> 00:14:35,760
listeners would want to see me in my

304
00:14:39,440 --> 00:14:37,530
great moment there of getting the the

305
00:14:41,870 --> 00:14:39,450
pie in the face where can they go to see

306
00:14:44,960 --> 00:14:41,880
that video oh yeah to smarter than that

307
00:14:48,980 --> 00:14:44,970
dot-com it's right there on the front

308
00:14:50,480 --> 00:14:48,990
page haha smile then that come I've got

309
00:14:51,829 --> 00:14:50,490
some wonderful photographs because we

310
00:14:53,329 --> 00:14:51,839
actually had a little audience there

311
00:14:55,579 --> 00:14:53,339
while we're doing it that was so that

312
00:14:57,470 --> 00:14:55,589
was so much fun we walked outside Noah's

313
00:14:58,910 --> 00:14:57,480

all these people were following us and

314

00:15:02,270 --> 00:14:58,920

they all stood around thinking what the

315

00:15:03,560 --> 00:15:02,280

hell of course I think I was walking

316

00:15:06,079 --> 00:15:03,570

around telling people I'm going to show

317

00:15:09,949 --> 00:15:06,089

us your cake in your face so everybody

318

00:15:12,980 --> 00:15:09,959

came yeah I are you intending to go to

319

00:15:15,380 --> 00:15:12,990

town this year yes of course my course

320

00:15:20,060 --> 00:15:15,390

you are actually I knew you were at

321

00:15:22,610 --> 00:15:20,070

midnight I could yes and and I only

322

00:15:24,000 --> 00:15:22,620

recently got myself together with

323

00:15:27,330 --> 00:15:24,010

finances and

324

00:15:29,670 --> 00:15:27,340

well other sundry items and I'm coming

325

00:15:31,260 --> 00:15:29,680

too so we will have another blast maybe

326

00:15:32,760 --> 00:15:31,270

we can do some other crazy experiment

327

00:15:35,850 --> 00:15:32,770

maybe I can shove a cream pie in your

328

00:15:39,630 --> 00:15:35,860

face well maybe but you'll need to find

329

00:15:41,340 --> 00:15:39,640

you know an experiment 2 mm to excuse it

330

00:15:44,070 --> 00:15:41,350

you know let's say we have to get an

331

00:15:45,750 --> 00:15:44,080

experiment with half naked

332

00:15:47,550 --> 00:15:45,760

people in a bathtub and rubber duckies

333

00:15:52,170 --> 00:15:47,560

and a microwave oven and I think we're

334

00:15:55,920 --> 00:15:52,180

on the right track I agree now you

335

00:15:58,020 --> 00:15:55,930

obviously really enjoy doing this work

336

00:15:59,400 --> 00:15:58,030

this this outreach and I suppose that's

337

00:16:01,860 --> 00:15:59,410

what you really are doing some really

338

00:16:03,690 --> 00:16:01,870

some really nice outreach but what a you

339

00:16:07,710 --> 00:16:03,700

seriously involved with apart from that

340

00:16:10,080 --> 00:16:07,720

you mean in real life in real life yeah

341

00:16:13,650 --> 00:16:10,090

that there is a real life apparently

342

00:16:17,430 --> 00:16:13,660

I've been told yes well I'm a physics

343

00:16:24,240 --> 00:16:17,440

student in college I'm hoping to get my

344

00:16:28,170 --> 00:16:24,250

eventually I'm about two maybe three

345

00:16:32,040 --> 00:16:28,180

fifths of the way towards finishing my

346

00:16:33,870 --> 00:16:32,050

first degree in physics and when I'm

347

00:16:37,740 --> 00:16:33,880

done I'm hoping to continue to Astro

348

00:16:39,630 --> 00:16:37,750

physics PhD Wow and in any case I'm

349

00:16:41,460 --> 00:16:39,640

going to continue doing these kind of

350

00:16:44,040 --> 00:16:41,470

things because I think this is very very

351

00:16:47,790 --> 00:16:44,050

important very important and it's a lot

352

00:16:49,890 --> 00:16:47,800

of fun oh I agree i mean-- odd i'm glad

353

00:16:52,110 --> 00:16:49,900

there's someone like you and in fact i'm

354

00:16:54,480 --> 00:16:52,120

probably embarrassed you slightly when I

355

00:16:55,710 --> 00:16:54,490

was speaking last year the amazing

356

00:16:57,510 --> 00:16:55,720

meeting because one of the first things

357

00:17:00,090 --> 00:16:57,520

I did was point you out to the audience

358

00:17:02,850 --> 00:17:00,100

and say his muy poo in the front row and

359

00:17:07,410 --> 00:17:02,860

she's one of my heroes right i was i was

360

00:17:08,970 --> 00:17:07,420

very surprised thank you that was great

361

00:17:12,180 --> 00:17:08,980

and it was great meeting you there and

362

00:17:14,670 --> 00:17:12,190

it was the tam is just amazing it was my

363

00:17:17,040 --> 00:17:14,680

first time last year and definitely not

364

00:17:18,840 --> 00:17:17,050

in my last well yeah it's it's if

365

00:17:20,670 --> 00:17:18,850

they're only listeners I know a couple

366

00:17:24,840 --> 00:17:20,680

of episodes ago on the skeptics and we

367

00:17:26,699 --> 00:17:24,850

ran a promotion for Tamra james randi

368

00:17:29,430 --> 00:17:26,709

did a little talk about what it's like

369

00:17:32,160 --> 00:17:29,440

and I know Brian Dunning's been talking

370

00:17:33,960 --> 00:17:32,170

about how amazing it is to be there but

371

00:17:35,610 --> 00:17:33,970

seriously it's it's like nothing you've

372

00:17:37,440 --> 00:17:35,620

ever experienced it's wall-to-wall

373

00:17:40,320 --> 00:17:37,450

skeptics of the big

374

00:17:44,460 --> 00:17:40,330

names of skepticism incredibly good

375

00:17:46,019 --> 00:17:44,470

talks parties Las Vegas and as I've said

376

00:17:48,000 --> 00:17:46,029

in the latest issue of the skeptic

377

00:17:51,570 --> 00:17:48,010

magazine here in Australia which I

378

00:17:54,240 --> 00:17:51,580

partly edit I said so the make sure you

379

00:17:57,080 --> 00:17:54,250

sell your car your possessions what's

380

00:17:59,669 --> 00:17:57,090

left of your soul get the Las Vegas

381

00:18:03,169 --> 00:17:59,679

absolutely and you know what the debates

382

00:18:07,080 --> 00:18:03,179

with people there is just unbelievable

383

00:18:09,629 --> 00:18:07,090

it's just everybody's you have the same

384

00:18:11,610 --> 00:18:09,639

attitude but you have so many people

385

00:18:14,810 --> 00:18:11,620

with so many backgrounds and it's just

386

00:18:16,980 --> 00:18:14,820

amazing image so many nice people and

387

00:18:18,779 --> 00:18:16,990

it's really hot but off of course you

388

00:18:22,190 --> 00:18:18,789

can spend time with James Randi which is

389

00:18:25,019 --> 00:18:22,200

just oh yeah that's that's absolutely

390

00:18:31,500 --> 00:18:25,029

well everyone there James Randi Phil

391

00:18:34,519 --> 00:18:31,510

Plait you hahaha you you yeah so

392

00:18:36,960 --> 00:18:34,529

listeners and if you're coming to town

393

00:18:39,779 --> 00:18:36,970

great if you're not coming to town then

394

00:18:41,700 --> 00:18:39,789

take my advice and come to town and make

395

00:18:44,669 --> 00:18:41,710

sure you do come up and say hello to

396

00:18:45,870 --> 00:18:44,679

myself and especially mari el how can

397

00:18:47,129 --> 00:18:45,880

they recognize you are you going to be

398

00:18:49,379 --> 00:18:47,139

walking around with a shirt that says

399

00:18:51,060 --> 00:18:49,389

it's me muy poo or a big hat or

400

00:18:54,120 --> 00:18:51,070

something like that well they can look

401
00:18:56,730 --> 00:18:54,130
at the videos yes I'm betting that now

402
00:18:58,799 --> 00:18:56,740
after we talked about this the Doppler

403
00:19:02,190 --> 00:18:58,809
effect one where I'm in the bathtub half

404
00:19:05,310 --> 00:19:02,200
naked well we'll probably get a lot of

405
00:19:09,240 --> 00:19:05,320
views now i don't think i'm going to

406
00:19:11,159 --> 00:19:09,250
walk in town naked but still you know

407
00:19:13,409 --> 00:19:11,169
you can you can see from from the videos

408
00:19:17,810 --> 00:19:13,419
well some of those parties get a bit

409
00:19:21,029 --> 00:19:17,820
wild you know well you know we'll see

410
00:19:24,870 --> 00:19:21,039
nah i think your tremendous Mario you

411
00:19:26,519 --> 00:19:24,880
sort of to me represent the real fun

412
00:19:28,830 --> 00:19:26,529
part of science where you so

413
00:19:32,370 --> 00:19:28,840

enthusiastic about presenting and you do

414

00:19:34,710 --> 00:19:32,380

it in such a funny way but at the same

415

00:19:36,779 --> 00:19:34,720

time people they can't help but learn

416

00:19:39,450 --> 00:19:36,789

the physics lesson which is involved and

417

00:19:41,370 --> 00:19:39,460

I also love the one where you have

418

00:19:43,379 --> 00:19:41,380

though now is it a tennis ball in a

419

00:19:46,379 --> 00:19:43,389

stockings which you're throwing back and

420

00:19:49,019 --> 00:19:46,389

forth to to illustrate Doppler right yes

421

00:19:51,220 --> 00:19:49,029

this is a the same one the same video

422

00:19:55,000 --> 00:19:51,230

yeah the same video that I start

423

00:19:57,850 --> 00:19:55,010

in the in the shower I also play with

424

00:19:59,770 --> 00:19:57,860

yeah with the ball in a stocking oh you

425

00:20:01,450 --> 00:19:59,780

start in the shower look she can't help

426

00:20:03,640 --> 00:20:01,460

herself folks she's in the bath she's in

427

00:20:07,299 --> 00:20:03,650

the shower I'm surprised she's wearing

428

00:20:09,820 --> 00:20:07,309

clothes at all but but it gets the

429

00:20:11,710 --> 00:20:09,830

message across so great you know people

430

00:20:15,190 --> 00:20:11,720

start watching from a different reason

431

00:20:18,520 --> 00:20:15,200

and they end up learning so hey why not

432

00:20:19,720 --> 00:20:18,530

I think you really you accomplishing

433

00:20:21,580 --> 00:20:19,730

what you set out to do which is

434

00:20:24,400 --> 00:20:21,590

fantastic and you're only young so

435

00:20:26,560 --> 00:20:24,410

you've got zillion years ahead of you to

436

00:20:29,919 --> 00:20:26,570

improve upon what you're doing and get

437

00:20:35,289 --> 00:20:29,929

the message out there so everybody after

438

00:20:40,210 --> 00:20:35,299

the show please go to ww mrta then that

439

00:20:42,850 --> 00:20:40,220

calm and then go to ww smart acts with

440

00:20:46,120 --> 00:20:42,860

an e comm check out Mario's videos

441

00:20:48,340 --> 00:20:46,130

they're fantastic and her sense of humor

442

00:20:50,080 --> 00:20:48,350

I think really helps carry the message

443

00:20:52,930 --> 00:20:50,090

so Morial thank you very much for

444

00:20:55,180 --> 00:20:52,940

talking to the skeptic zone today thank

445

00:20:57,010 --> 00:20:55,190

you thank you very much and thanks for

446

00:20:59,289 --> 00:20:57,020

everything you're doing this is a great

447

00:21:03,880 --> 00:20:59,299

podcast keep it up oh thank you very

448

00:21:22,090 --> 00:21:03,890

much and I'll see you at am oh yeah with

449

00:21:24,490 --> 00:21:22,100

a cake cake to the pie and a bathtub the

450

00:21:27,700 --> 00:21:24,500

skeptic the magazine from Australian

451
00:21:30,490 --> 00:21:27,710
skeptics now in its 29th year it's about

452
00:21:32,169 --> 00:21:30,500
to come out for the month of June's now

453
00:21:35,470 --> 00:21:32,179
in this issue we have a rare interview

454
00:21:37,510 --> 00:21:35,480
with actor and skeptic Stephen Fry a

455
00:21:40,360 --> 00:21:37,520
disturbing report on the activities of

456
00:21:44,409 --> 00:21:40,370
the Australian anti-vaccination network

457
00:21:47,110 --> 00:21:44,419
is breasts really best we look for

458
00:21:49,900 --> 00:21:47,120
ghosts in Adelaide visit the mind body

459
00:21:52,210 --> 00:21:49,910
and spirit festival hear about the young

460
00:21:54,830 --> 00:21:52,220
Australian skeptics and find out what

461
00:21:58,010 --> 00:21:54,840
happened to the fake popemobile

462
00:22:00,650 --> 00:21:58,020
a lot more to including the return of

463
00:22:02,570 --> 00:22:00,660

the skeptical crossword now if you're

464

00:22:08,150 --> 00:22:02,580

not a subscriber to the skeptic magazine

465

00:22:10,100 --> 00:22:08,160

head to ww skeptics comte you click on

466

00:22:12,850 --> 00:22:10,110

the journal link and you can subscribe

467

00:22:18,050 --> 00:22:12,860

by there the skeptic the Journal of

468

00:22:19,460 --> 00:22:18,060

Australian skeptics and if I may some of

469

00:22:22,190 --> 00:22:19,470

you may know that I'm somewhat of an

470

00:22:25,070 --> 00:22:22,200

origami expert and together with my good

471

00:22:28,820 --> 00:22:25,080

friend Gary Clark we've released video

472

00:22:32,480 --> 00:22:28,830

origami onto iTunes for ipod touch and

473

00:22:34,550 --> 00:22:32,490

iphone go to itunes and search for video

474

00:22:37,160 --> 00:22:34,560

origami it's only a couple of dollars

475

00:22:47,150 --> 00:22:37,170

and you can get started folding straight

476

00:22:49,760 --> 00:22:47,160

away calling all skeptics in

477

00:22:51,620 --> 00:22:49,770

Christchurch New Zealand now you too can

478

00:22:53,870 --> 00:22:51,630

enjoy the worldwide crease that are

479

00:22:56,180 --> 00:22:53,880

skeptics in the pub just head to the

480

00:22:57,980 --> 00:22:56,190

twisted hop on the second monday in june

481

00:23:01,130 --> 00:22:57,990

to meet other like-minded drinkers and

482

00:23:05,180 --> 00:23:01,140

thinkers all the details can be found at

483

00:23:09,530 --> 00:23:05,190

meetup com / Christchurch dash skeptic

484

00:23:12,440 --> 00:23:09,540

stash in dash the dash pub so turn up

485

00:23:31,130 --> 00:23:12,450

drink up and tell them the skeptic sign

486

00:23:35,730 --> 00:23:33,390

thank you for listening to this episode

487

00:23:37,710 --> 00:23:35,740

of the skeptic zone join us again next

488

00:23:39,930 --> 00:23:37,720

week where we'll give you a full report

489

00:23:42,120 --> 00:23:39,940

about our trip to melbourne doctor edgy

490

00:23:44,970 --> 00:23:42,130

myself Kylie Sturgis and Dave the happy

491

00:23:46,980 --> 00:23:44,980

singer where we meet up with the young

492

00:23:48,810 --> 00:23:46,990

Australian skeptics and give our

493

00:23:50,760 --> 00:23:48,820

Saturday night talk Saturday the

494

00:23:53,760 --> 00:23:50,770

thirtieth in fact if you're listening to

495

00:23:56,010 --> 00:23:53,770

this on Friday the 29th or Saturday the

496

00:23:58,440 --> 00:23:56,020

thirtieth in your in Melbourne you still

497

00:24:03,120 --> 00:23:58,450

have time to come and join us head to ww

498

00:24:05,100 --> 00:24:03,130

skeptic zone TV for details until next

499

00:24:10,860 --> 00:24:05,110

week this is Richard Saunders signing

500

00:24:13,140 --> 00:24:10,870

off from Sydney Australia you've been

501

00:24:17,670 --> 00:24:13,150

listening to the skeptic zone visit our

502

00:24:20,160 --> 00:24:17,680

website at [www.skeptics on TV](http://www.skepticsontv.com) for

503

00:24:22,430 --> 00:24:20,170

comments contacts and extra video

504

00:24:27,570 --> 00:24:22,440

reports