

1
00:00:00,000 --> 00:00:05,669
you're listening to skep tide I'm Brian

2
00:00:02,428 --> 00:00:15,298
Dunning from sceptile calm was Chuck

3
00:00:05,669 --> 00:00:18,710
Yeager fool oops sorry about that um no

4
00:00:15,298 --> 00:00:18,710
which one is it okay let me try this one

5
00:00:23,510 --> 00:00:26,170
change

6
00:00:30,280 --> 00:00:32,310
Oh

7
00:00:37,829 --> 00:00:44,530
welcome to the skeptic zone show number

8
00:00:40,750 --> 00:00:47,469
32 for the 29th of May Richard Saunders

9
00:00:44,530 --> 00:00:49,239
with you a bit of a short show this week

10
00:00:47,469 --> 00:00:51,670
I'm flying down to Melbourne together

11
00:00:49,238 --> 00:00:54,669
with dr. Rachel Kylie Sturgis and Dave

12
00:00:51,670 --> 00:00:56,140
the happy singer to give some talk so we

13
00:00:54,670 --> 00:00:58,510
haven't got much time foot to give her a

14
00:00:56,140 --> 00:01:01,478
show however I did manage to catch up

15
00:00:58,509 --> 00:01:05,259
with Mario shot lander otherwise known

16
00:01:01,478 --> 00:01:09,340
as muy poo for an interview so sit back

17
00:01:05,259 --> 00:01:12,629
relax have a cup of tea and enjoy my

18
00:01:09,340 --> 00:01:12,630
talk with Mario

19
00:01:24,969 --> 00:01:31,789
mari el shot lander from New York

20
00:01:28,000 --> 00:01:34,549
otherwise known as muy poo is a physics

21
00:01:31,790 --> 00:01:37,399
student with a passion for space and

22
00:01:34,549 --> 00:01:39,799
astronomy in fact she wants to be the

23
00:01:37,399 --> 00:01:42,859
first woman to land on the moon and I'm

24
00:01:39,799 --> 00:01:52,189
sure she will be too I spoke with mari

25
00:01:42,859 --> 00:01:54,530
el a few days ago from Queens and we're

26
00:01:52,188 --> 00:01:56,359
talking with mari el right now on the

27
00:01:54,530 --> 00:02:00,409
line from new york city new york city

28
00:01:56,359 --> 00:02:02,769
isn't it Morial it is it is actually at

29

00:02:00,409 --> 00:02:05,600
Queens but that's still New York City

30
00:02:02,769 --> 00:02:07,310
Queens in New York City fantastic I've

31
00:02:05,599 --> 00:02:10,310
never been to New York I'd love to come

32
00:02:07,310 --> 00:02:12,049
and visit you should I sure and it's

33
00:02:10,310 --> 00:02:14,959
starting the summer now so it's very

34
00:02:12,049 --> 00:02:18,290
good weather fantastic now you've had a

35
00:02:14,959 --> 00:02:20,030
very interesting career in on the

36
00:02:18,289 --> 00:02:22,459
internet and in skepticism but you

37
00:02:20,030 --> 00:02:23,870
haven't been really around or active for

38
00:02:22,459 --> 00:02:26,000
too long but you've certainly made an

39
00:02:23,870 --> 00:02:28,700
impact when did you really get started

40
00:02:26,000 --> 00:02:32,629
with your adventures into science in the

41
00:02:28,699 --> 00:02:37,509
internet actually quite a long time ago

42
00:02:32,629 --> 00:02:40,370
but I started in YouTube I started with

43
00:02:37,509 --> 00:02:44,389

video debates on YouTube there were

44

00:02:40,370 --> 00:02:46,579

questions asked and answered and then I

45

00:02:44,389 --> 00:02:48,919

saw that there's a lot of interest in a

46

00:02:46,579 --> 00:02:51,859

lot of people that have questions about

47

00:02:48,919 --> 00:02:55,548

science or scientific subjects and not a

48

00:02:51,859 --> 00:02:57,829

lot of them that really get answered and

49

00:02:55,549 --> 00:03:02,239

I took that as a challenge and I started

50

00:02:57,829 --> 00:03:03,560

putting up astronomy videos and I saw

51

00:03:02,239 --> 00:03:06,950

that there's there's actually a lot of

52

00:03:03,560 --> 00:03:09,709

interest and I was positively surprised

53

00:03:06,949 --> 00:03:13,089

and I decided to take it step further

54

00:03:09,709 --> 00:03:15,799

and I started smarter than that which is

55

00:03:13,090 --> 00:03:19,180

the experiment website it's a

56

00:03:15,799 --> 00:03:22,400

do-it-yourself experiments on YouTube

57

00:03:19,180 --> 00:03:24,769

with an accompanying site to explain all

58
00:03:22,400 --> 00:03:26,629
the experiments and to show how you can

59
00:03:24,769 --> 00:03:29,420
do it at home and those experiments show

60
00:03:26,629 --> 00:03:31,759
you scientific phenomena that you can

61
00:03:29,419 --> 00:03:34,009
you can see for yourself not not you

62
00:03:31,759 --> 00:03:36,780
know research or store

63
00:03:34,009 --> 00:03:39,179
believe the scientists that you've never

64
00:03:36,780 --> 00:03:42,900
met before you don't know just do it

65
00:03:39,180 --> 00:03:45,090
yourself see for yourself and learn yeah

66
00:03:42,900 --> 00:03:47,129
now I became hooked on those videos

67
00:03:45,090 --> 00:03:48,719
because I loved the one where you

68
00:03:47,129 --> 00:03:50,310
explain the speed of light in the

69
00:03:48,719 --> 00:03:53,219
microwave and then that was all very

70
00:03:50,310 --> 00:03:55,409
funny and then I couldn't believe my

71
00:03:53,219 --> 00:03:58,680
eyes you were sort of almost half naked

72
00:03:55,409 --> 00:04:01,139
in the bath can you explain that one all

73
00:03:58,680 --> 00:04:04,950
right actually it was it was the first

74
00:04:01,139 --> 00:04:08,639
meant as a as a like a joke because I

75
00:04:04,949 --> 00:04:11,310
wasn't at all naked um like oh you've

76
00:04:08,639 --> 00:04:13,409
spoiled it now I was no I know I'm sorry

77
00:04:11,310 --> 00:04:17,970
to disappoint I was almost naked though

78
00:04:13,409 --> 00:04:19,560
if that helps oh thank you but um i was

79
00:04:17,970 --> 00:04:22,140
i was actually filming this with my

80
00:04:19,560 --> 00:04:23,939
roommate at the time and i started

81
00:04:22,139 --> 00:04:25,769
explaining and she had a lot of

82
00:04:23,939 --> 00:04:27,060
questions in the middle of the video and

83
00:04:25,769 --> 00:04:28,949
it took me a while to explain to her

84
00:04:27,060 --> 00:04:31,319
that I don't mind explaining but in

85
00:04:28,949 --> 00:04:34,649
order for me to actually film this she

86

00:04:31,319 --> 00:04:37,500
needs to be quiet and if you listen very

87
00:04:34,649 --> 00:04:40,279
carefully you can hear her giggle in the

88
00:04:37,500 --> 00:04:42,509
background and so as we were filming

89
00:04:40,279 --> 00:04:46,079
there were more and more bubbles because

90
00:04:42,509 --> 00:04:48,420
we just had so many takes filming this

91
00:04:46,079 --> 00:04:49,560
while she was trying not to laugh that

92
00:04:48,420 --> 00:04:51,240
there were so many bubbles that I

93
00:04:49,560 --> 00:04:57,750
started just covering myself but he just

94
00:04:51,240 --> 00:04:59,850
created a very nice the effect yes yes I

95
00:04:57,750 --> 00:05:02,009
guess that I think that worked very well

96
00:04:59,850 --> 00:05:03,900
because it's like did she did she really

97
00:05:02,009 --> 00:05:05,670
go half naked in the bath to make this

98
00:05:03,899 --> 00:05:07,709
video or I'm not sure that would that I

99
00:05:05,670 --> 00:05:09,210
thought that was very cute you know but

100
00:05:07,709 --> 00:05:11,489

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

101

00:05:09,209 --> 00:05:13,649

that I started the other project that

102

00:05:11,490 --> 00:05:16,259

I'm that I started recently smart acts

103

00:05:13,649 --> 00:05:22,859

calm which by the way it's an ex with an

104

00:05:16,259 --> 00:05:25,199

e at the end so SM a RT a XE right right

105

00:05:22,860 --> 00:05:26,569

I wanted to take small acts without an e

106

00:05:25,199 --> 00:05:32,550

but apparently it's some sort of

107

00:05:26,569 --> 00:05:34,589

medicine oh yes and I yeah it kind of

108

00:05:32,550 --> 00:05:37,199

sounds like a medicine too so I didn't

109

00:05:34,589 --> 00:05:38,759

want to go there but only later I

110

00:05:37,199 --> 00:05:43,409

learned that you can actually spell it

111

00:05:38,759 --> 00:05:46,168

without an e so yeah yeah also recently

112

00:05:43,410 --> 00:05:47,760

we started with in small X with a new

113

00:05:46,168 --> 00:05:51,149

project on Twitter called

114

00:05:47,759 --> 00:05:54,529

ask tirana me where we have a few

115
00:05:51,149 --> 00:05:57,870
experts in astronomy knowledgeable

116
00:05:54,529 --> 00:06:00,689
amateurs or actual experts who will

117
00:05:57,870 --> 00:06:03,899
answer your question and Twitter if you

118
00:06:00,689 --> 00:06:09,120
use the hashtag ask Tirana me which is a

119
00:06:03,899 --> 00:06:11,609
sk TR 0 and oh my so just do that and

120
00:06:09,120 --> 00:06:14,189
get your answers and participate in a

121
00:06:11,610 --> 00:06:16,500
debate about astronomy and if people

122
00:06:14,189 --> 00:06:18,870
want to follow you personally on Twitter

123
00:06:16,500 --> 00:06:22,500
what's your twitter name my twitter name

124
00:06:18,870 --> 00:06:23,970
is muy poo and the more than welcome to

125
00:06:22,500 --> 00:06:26,790
ask me questions and approach me there

126
00:06:23,970 --> 00:06:34,500
and follow me movie poof and that spelt

127
00:06:26,790 --> 00:06:38,240
m 0 0 ey P oh oh alright but that's

128
00:06:34,500 --> 00:06:41,160
that's one of the reasons that this bath

129
00:06:38,240 --> 00:06:42,990
video that I decided also to go for that

130
00:06:41,160 --> 00:06:46,200
project because I saw that the reaction

131
00:06:42,990 --> 00:06:48,540
for that video for the Doppler effect

132
00:06:46,199 --> 00:06:52,129
video where I'm in the I'm starting it

133
00:06:48,540 --> 00:06:56,910
in the bathtub and I'm I appeared to be

134
00:06:52,129 --> 00:07:00,589
naked the reactions were suddenly good

135
00:06:56,910 --> 00:07:03,000
from two levels first the the usual

136
00:07:00,589 --> 00:07:05,639
target audience that is more you know

137
00:07:03,000 --> 00:07:08,730
kid friendly people really enjoy that I

138
00:07:05,639 --> 00:07:11,339
got a lot of emails from teachers that

139
00:07:08,730 --> 00:07:13,200
enjoyed the experiment and enjoyed you

140
00:07:11,339 --> 00:07:15,419
know the the demonstration but then I

141
00:07:13,199 --> 00:07:18,509
also got you know messages from just

142
00:07:15,420 --> 00:07:21,180
random people who saw me in the you know

143

00:07:18,509 --> 00:07:22,800
saw the beginning of the video and

144
00:07:21,180 --> 00:07:24,509
thought it was really funny and then

145
00:07:22,800 --> 00:07:26,370
just continued watching and got the

146
00:07:24,509 --> 00:07:29,219
science of it as you know in the back

147
00:07:26,370 --> 00:07:30,810
door yes and and I thought it was really

148
00:07:29,220 --> 00:07:32,820
cool and I thought you know what this is

149
00:07:30,810 --> 00:07:34,500
this is a great opportunity to take

150
00:07:32,819 --> 00:07:38,009
advantage of a target audience that is

151
00:07:34,500 --> 00:07:40,649
usually hard to to you know to get to

152
00:07:38,009 --> 00:07:43,949
because those are usually people who you

153
00:07:40,649 --> 00:07:45,569
know don't don't naturally go to the

154
00:07:43,949 --> 00:07:49,199
science stuff think that the science

155
00:07:45,569 --> 00:07:51,990
stuff is nerdy argue yes yes yes and

156
00:07:49,199 --> 00:07:55,769
then I but of course you really want my

157
00:07:51,990 --> 00:07:58,740

heart with the little duckies in the

158

00:07:55,769 --> 00:08:01,199

bath and the mommy ducky and yes yeah

159

00:07:58,740 --> 00:08:03,900

which is I think it the line

160

00:08:01,199 --> 00:08:06,120

for way to to do the science experiments

161

00:08:03,899 --> 00:08:08,759

what other videos did you put out there

162

00:08:06,120 --> 00:08:13,829

well recently I put one about a weight

163

00:08:08,759 --> 00:08:15,659

and mass hmm which which is funny

164

00:08:13,829 --> 00:08:18,539

because I already have one video about

165

00:08:15,660 --> 00:08:20,640

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

166

00:08:18,540 --> 00:08:23,129

nothing bad nothing too bad but it's not

167

00:08:20,639 --> 00:08:24,779

kid friendly and I wanted to add

168

00:08:23,129 --> 00:08:26,310

something that is kid-friendly because

169

00:08:24,779 --> 00:08:28,879

this is you know that there are many

170

00:08:26,310 --> 00:08:33,960

misconceptions are with weight and mass

171

00:08:28,879 --> 00:08:38,029

that started a young age and so I put it

172
00:08:33,960 --> 00:08:40,918
up recently and I used the analogy of

173
00:08:38,029 --> 00:08:43,799
you know space travel of orbit where you

174
00:08:40,918 --> 00:08:45,809
are weightless but you still have mass

175
00:08:43,799 --> 00:08:48,870
you still have the same mass but your

176
00:08:45,809 --> 00:08:50,819
weight varies depending on on well if

177
00:08:48,870 --> 00:08:53,690
you're on the Moon or Mars or earth or

178
00:08:50,820 --> 00:08:53,690
whatever the case may be

179
00:08:58,259 --> 00:09:04,739
listen up fitness fans it's physics time

180
00:09:01,198 --> 00:09:06,958
weight is not the same as mass mass

181
00:09:04,739 --> 00:09:10,168
loosely speaking is the amount of matter

182
00:09:06,958 --> 00:09:13,048
in an object weight is the force that

183
00:09:10,168 --> 00:09:16,168
the object is exerting on the ground we

184
00:09:13,048 --> 00:09:18,659
measure that force using a scale weight

185
00:09:16,168 --> 00:09:21,208
is a multiplication of your mass and the

186
00:09:18,659 --> 00:09:23,759
force of gravity if you increase or

187
00:09:21,208 --> 00:09:26,248
decrease any of these variables your way

188
00:09:23,759 --> 00:09:28,619
to the changes accordingly the moon's

189
00:09:26,249 --> 00:09:30,808
gravity is one-sixth of that of the

190
00:09:28,619 --> 00:09:32,459
Earth's if you land on the moon you will

191
00:09:30,808 --> 00:09:36,538
weigh six times less than you do on

192
00:09:32,458 --> 00:09:39,568
earth but your mass remains the same the

193
00:09:36,538 --> 00:09:42,568
particles that make you you didn't go

194
00:09:39,568 --> 00:09:44,759
anywhere your scale will show a six of

195
00:09:42,568 --> 00:09:46,889
your original weight on earth if your

196
00:09:44,759 --> 00:09:49,678
goal is to lose weight when you just

197
00:09:46,889 --> 00:09:51,928
achieved it but you can also reduce your

198
00:09:49,678 --> 00:09:54,778
weight without reducing your mass here

199
00:09:51,928 --> 00:09:56,608
on earth for example any time you go

200

00:09:54,778 --> 00:09:59,009
down an elevator in a tall building you

201
00:09:56,609 --> 00:10:01,079
are losing weight while the elevator is

202
00:09:59,009 --> 00:10:03,449
accelerating it is moving away from your

203
00:10:01,078 --> 00:10:05,368
feet and you are essentially falling

204
00:10:03,448 --> 00:10:07,618
when you go up a tall building the

205
00:10:05,369 --> 00:10:09,149
elevators acceleration is upwards and

206
00:10:07,619 --> 00:10:11,249
you're pressed strongly against the

207
00:10:09,149 --> 00:10:13,499
floor a situation that increases your

208
00:10:11,249 --> 00:10:15,418
weight quite a few amusement park rides

209
00:10:13,499 --> 00:10:18,569
use these principles to get your guts

210
00:10:15,418 --> 00:10:20,369
churning but everyone knows that the

211
00:10:18,568 --> 00:10:23,038
best way to lose weight is to exercise

212
00:10:20,369 --> 00:10:25,259
and eat right that is true only because

213
00:10:23,038 --> 00:10:27,448
exercise and nutrition will help you get

214
00:10:25,259 --> 00:10:30,209

rid of the massive fat in your body and

215

00:10:27,448 --> 00:10:32,909

by that decrease your weight when you

216

00:10:30,208 --> 00:10:35,578

exercise your body burns fat and builds

217

00:10:32,909 --> 00:10:37,980

muscle muscles are denser than fat and

218

00:10:35,578 --> 00:10:39,808

have more mass per unit volume that's

219

00:10:37,980 --> 00:10:41,489

why it is typical to gain a bit of

220

00:10:39,808 --> 00:10:43,588

weight if your weight loss routine

221

00:10:41,489 --> 00:10:46,439

includes a building muscle you replace

222

00:10:43,589 --> 00:10:49,679

the lighter massive fat with a denser

223

00:10:46,438 --> 00:10:53,158

and heavier mass of muscle your goal is

224

00:10:49,678 --> 00:10:55,678

to lose the fat hence to lose mass the

225

00:10:53,158 --> 00:10:58,408

result is that the scale is telling you

226

00:10:55,678 --> 00:11:00,539

that your weight is smaller and weight

227

00:10:58,408 --> 00:11:02,669

is not the same as mass

228

00:11:00,539 --> 00:11:04,740

the term weight loss is so ingrained in

229

00:11:02,669 --> 00:11:06,929

our society that it will be futile of me

230

00:11:04,740 --> 00:11:08,970

to try and get you to stop using it that

231

00:11:06,929 --> 00:11:10,469

does not mean however that you can't

232

00:11:08,970 --> 00:11:13,830

understand the physics behind those

233

00:11:10,470 --> 00:11:15,840

terms so remember if your goal is to

234

00:11:13,830 --> 00:11:17,730

lose weight write down an elevator or

235

00:11:15,840 --> 00:11:21,060

jump off a plane with a parachute if

236

00:11:17,730 --> 00:11:23,070

your goal is to be leaner exercise and

237

00:11:21,059 --> 00:11:24,599

eat right and get rid of that massive

238

00:11:23,070 --> 00:11:26,910

fat that surrounds your muscles

239

00:11:24,600 --> 00:11:28,769

alternatively you can go live on the

240

00:11:26,909 --> 00:11:35,639

International Space Station where weight

241

00:11:28,769 --> 00:11:37,199

is not really an issue you know I go to

242

00:11:35,639 --> 00:11:38,580

the gym and there are a lot of people

243
00:11:37,200 --> 00:11:40,620
who you know talk about losing weight

244
00:11:38,580 --> 00:11:41,940
and I always say well you know what if

245
00:11:40,620 --> 00:11:43,649
you want to lose weight jump off an

246
00:11:41,940 --> 00:11:46,560
airplane with a parachute that's a great

247
00:11:43,649 --> 00:11:49,169
way of losing weight but the goal you

248
00:11:46,559 --> 00:11:51,299
know is to lose the fat the the the mass

249
00:11:49,169 --> 00:11:52,740
of fat so that's different you know

250
00:11:51,299 --> 00:11:56,609
different thing altogether so that's a

251
00:11:52,740 --> 00:11:59,340
the the recent video i put up i'm hoping

252
00:11:56,610 --> 00:12:01,800
to put up a little bit more now that I'm

253
00:11:59,340 --> 00:12:06,120
no longer in a semester for a little

254
00:12:01,799 --> 00:12:08,309
while I'm not sure what about yet I have

255
00:12:06,120 --> 00:12:10,320
a few ideas oh I'm sure I'll listeners

256
00:12:08,309 --> 00:12:14,819
consent send you some ideas but I think

257

00:12:10,320 --> 00:12:17,040
what would I enjoyed so much was meeting

258
00:12:14,820 --> 00:12:21,270
you for the first time at last year's

259
00:12:17,039 --> 00:12:23,519
amazing meeting tam six and I remember I

260
00:12:21,269 --> 00:12:24,990
was jet-lagged out of my brain but I was

261
00:12:23,519 --> 00:12:27,149
going up an escalator and you were

262
00:12:24,990 --> 00:12:29,250
coming down to dinner or lunch or who

263
00:12:27,149 --> 00:12:31,529
knows what it was they were oh my

264
00:12:29,250 --> 00:12:32,759
goodness me it's muy poo and then the

265
00:12:31,529 --> 00:12:35,579
next thing I know you're dragging me

266
00:12:32,759 --> 00:12:38,399
outside to shovel a cream pie in my face

267
00:12:35,580 --> 00:12:42,090
oh that was the highlight of time I

268
00:12:38,399 --> 00:12:44,250
think it was for me but but it was all

269
00:12:42,090 --> 00:12:46,350
for science and it was great we actually

270
00:12:44,250 --> 00:12:48,570
proved a few things there and can you

271
00:12:46,350 --> 00:12:51,570

let our listeners know exactly why why

272

00:12:48,570 --> 00:12:53,490

you did in fact shove two creampie's in

273

00:12:51,570 --> 00:12:55,710

my face in fact do I really need to

274

00:12:53,490 --> 00:12:58,680

explain I don't you do you typically I

275

00:12:55,710 --> 00:13:00,509

mean yes well I mean everyone wants to

276

00:12:58,679 --> 00:13:03,659

shove creampie's into my face but you did

277

00:13:00,509 --> 00:13:07,439

it for science exactly and um yes well

278

00:13:03,659 --> 00:13:12,480

that was the excuse anyways we wanted to

279

00:13:07,440 --> 00:13:14,310

see what what goes on when you transfer

280

00:13:12,480 --> 00:13:18,240

a three-dimensional

281

00:13:14,309 --> 00:13:22,679

body like your face for in that example

282

00:13:18,240 --> 00:13:25,379

onto a two-dimensional plane like a page

283

00:13:22,679 --> 00:13:28,769

and we wanted to show that in order to

284

00:13:25,379 --> 00:13:31,710

show really that things like a shroud of

285

00:13:28,769 --> 00:13:36,120

turin where you look at a piece of cloth

286
00:13:31,710 --> 00:13:38,310
and you see an actual face as if like it

287
00:13:36,120 --> 00:13:40,710
doesn't look distorted it looks as if

288
00:13:38,309 --> 00:13:42,509
you took a picture of someone and we

289
00:13:40,710 --> 00:13:44,370
wanted to see if if that's logical if

290
00:13:42,509 --> 00:13:48,000
that's something that you know if this

291
00:13:44,370 --> 00:13:52,320
shroud really did cover someone's face

292
00:13:48,000 --> 00:13:57,809
and then we peel it off would we see a

293
00:13:52,320 --> 00:14:01,700
normal face so we use the cream on your

294
00:13:57,809 --> 00:14:05,849
face and then with a piece of paper and

295
00:14:01,700 --> 00:14:08,278
we saw that it was very amusing but it

296
00:14:05,850 --> 00:14:10,980
didn't look like you really it was very

297
00:14:08,278 --> 00:14:13,200
amusing I remember course it was a las

298
00:14:10,980 --> 00:14:15,180
vegas in the middle of summer we stepped

299
00:14:13,200 --> 00:14:17,580
outside to do this and by the time you

300
00:14:15,179 --> 00:14:20,459
squash the cream which is really whipped

301
00:14:17,580 --> 00:14:22,320
cream on plates into my face it wasn't

302
00:14:20,460 --> 00:14:27,110
very long before they all began to melt

303
00:14:22,320 --> 00:14:30,720
and yeah that was outfit it was it was I

304
00:14:27,110 --> 00:14:33,899
yeah I commend you for your effort to

305
00:14:30,720 --> 00:14:35,759
science Oh anything besides if our

306
00:14:33,899 --> 00:14:37,529
listeners would want to see me in my

307
00:14:35,759 --> 00:14:39,450
great moment there of getting the the

308
00:14:37,529 --> 00:14:41,879
pie in the face where can they go to see

309
00:14:39,450 --> 00:14:44,970
that video oh yeah to smarter than that

310
00:14:41,879 --> 00:14:48,990
dot-com it's right there on the front

311
00:14:44,970 --> 00:14:50,490
page haha smile then that come I've got

312
00:14:48,990 --> 00:14:51,839
some wonderful photographs because we

313
00:14:50,490 --> 00:14:53,339
actually had a little audience there

314

00:14:51,839 --> 00:14:55,589
while we're doing it that was so that

315
00:14:53,339 --> 00:14:57,480
was so much fun we walked outside Noah's

316
00:14:55,589 --> 00:14:58,920
all these people were following us and

317
00:14:57,480 --> 00:15:02,279
they all stood around thinking what the

318
00:14:58,919 --> 00:15:03,569
hell of course I think I was walking

319
00:15:02,279 --> 00:15:06,088
around telling people I'm going to show

320
00:15:03,570 --> 00:15:09,959
us your cake in your face so everybody

321
00:15:06,089 --> 00:15:12,990
came yeah I are you intending to go to

322
00:15:09,958 --> 00:15:15,389
town this year yes of course my course

323
00:15:12,990 --> 00:15:20,070
you are actually I knew you were at

324
00:15:15,389 --> 00:15:22,620
midnight I could yes and and I only

325
00:15:20,070 --> 00:15:24,010
recently got myself together with

326
00:15:22,620 --> 00:15:27,340
finances and

327
00:15:24,009 --> 00:15:29,679
well other sundry items and I'm coming

328
00:15:27,340 --> 00:15:31,269

too so we will have another blast maybe

329

00:15:29,679 --> 00:15:32,769

we can do some other crazy experiment

330

00:15:31,269 --> 00:15:35,860

maybe I can shove a cream pie in your

331

00:15:32,769 --> 00:15:39,639

face well maybe but you'll need to find

332

00:15:35,860 --> 00:15:41,350

you know an experiment 2 mm to excuse it

333

00:15:39,639 --> 00:15:44,080

you know let's say we have to get an

334

00:15:41,350 --> 00:15:45,759

experiment with creampiees half naked

335

00:15:44,080 --> 00:15:47,560

people in a bathtub and rubber duckies

336

00:15:45,759 --> 00:15:52,179

and a microwave oven and I think we're

337

00:15:47,559 --> 00:15:55,929

on the right track I agree now you

338

00:15:52,179 --> 00:15:58,029

obviously really enjoy doing this work

339

00:15:55,929 --> 00:15:59,409

this this outreach and I suppose that's

340

00:15:58,029 --> 00:16:01,870

what you really are doing some really

341

00:15:59,409 --> 00:16:03,699

some really nice outreach but what a you

342

00:16:01,870 --> 00:16:07,720

seriously involved with apart from that

343
00:16:03,700 --> 00:16:10,090
you mean in real life in real life yeah

344
00:16:07,720 --> 00:16:13,660
that there is a real life apparently

345
00:16:10,090 --> 00:16:17,440
I've been told yes well I'm a physics

346
00:16:13,659 --> 00:16:24,250
student in college I'm hoping to get my

347
00:16:17,440 --> 00:16:28,180
eventually i'm about two maybe three

348
00:16:24,250 --> 00:16:32,049
fifths of the way towards finishing my

349
00:16:28,179 --> 00:16:33,879
first degree in physics and when i'm

350
00:16:32,049 --> 00:16:37,750
done i'm hoping to continue to Astro

351
00:16:33,879 --> 00:16:39,639
physics PhD Wow and in any case I'm

352
00:16:37,750 --> 00:16:41,470
going to continue doing these kind of

353
00:16:39,639 --> 00:16:44,049
things because I think this is very very

354
00:16:41,470 --> 00:16:47,800
important very important and it's a lot

355
00:16:44,049 --> 00:16:49,899
of fun oh I agree i mean-- odd i'm glad

356
00:16:47,799 --> 00:16:52,120
there's someone like you and in fact i'm

357
00:16:49,899 --> 00:16:54,490
probably embarrassed you slightly when I

358
00:16:52,120 --> 00:16:55,720
was speaking last year the amazing

359
00:16:54,490 --> 00:16:57,519
meeting because one of the first things

360
00:16:55,720 --> 00:17:00,100
I did was point you out to the audience

361
00:16:57,519 --> 00:17:02,860
and say his muy poo in the front row and

362
00:17:00,100 --> 00:17:07,420
she's one of my heroes right i was i was

363
00:17:02,860 --> 00:17:08,980
very surprised thank you that was great

364
00:17:07,420 --> 00:17:12,190
and it was great meeting you there and

365
00:17:08,980 --> 00:17:14,680
it was the tam is just amazing it was my

366
00:17:12,190 --> 00:17:17,049
first time last year and definitely not

367
00:17:14,680 --> 00:17:18,850
in my last well yeah it's it's if

368
00:17:17,049 --> 00:17:20,680
they're only listeners I know a couple

369
00:17:18,849 --> 00:17:24,849
of episodes ago on the skeptics and we

370
00:17:20,680 --> 00:17:26,709
ran a promotion for Tamra james randi

371

00:17:24,849 --> 00:17:29,439
did a little talk about what it's like

372
00:17:26,709 --> 00:17:32,170
and I know Brian Dunning's been talking

373
00:17:29,440 --> 00:17:33,970
about how amazing it is to be there but

374
00:17:32,170 --> 00:17:35,620
seriously it's it's like nothing you've

375
00:17:33,970 --> 00:17:37,450
ever experienced it's wall-to-wall

376
00:17:35,619 --> 00:17:40,329
skeptics of the big

377
00:17:37,450 --> 00:17:44,470
names of skepticism incredibly good

378
00:17:40,329 --> 00:17:46,028
talks parties Las Vegas and as I've said

379
00:17:44,470 --> 00:17:48,009
in the latest issue of the skeptic

380
00:17:46,028 --> 00:17:51,579
magazine here in Australia which I

381
00:17:48,009 --> 00:17:54,250
partly edit I said so the make sure you

382
00:17:51,579 --> 00:17:57,089
sell your car your possessions what's

383
00:17:54,250 --> 00:17:59,679
left of your soul get the Las Vegas

384
00:17:57,089 --> 00:18:03,178
absolutely and you know what the debates

385
00:17:59,679 --> 00:18:07,090

with people there is just unbelievable

386

00:18:03,179 --> 00:18:09,639

it's just everybody's you have the same

387

00:18:07,089 --> 00:18:11,619

attitude but you have so many people

388

00:18:09,638 --> 00:18:14,819

with so many backgrounds and it's just

389

00:18:11,619 --> 00:18:16,989

amazing image so many nice people and

390

00:18:14,819 --> 00:18:18,788

it's really hot but off of course you

391

00:18:16,990 --> 00:18:22,200

can spend time with James Randi which is

392

00:18:18,788 --> 00:18:25,028

just oh yeah that's that's absolutely

393

00:18:22,200 --> 00:18:31,509

well everyone there James Randi Phil

394

00:18:25,028 --> 00:18:34,528

Plait you hahaha you you yeah so

395

00:18:31,509 --> 00:18:36,970

listeners and if you're coming to town

396

00:18:34,528 --> 00:18:39,788

great if you're not coming to town then

397

00:18:36,970 --> 00:18:41,710

take my advice and come to town and make

398

00:18:39,788 --> 00:18:44,679

sure you do come up and say hello to

399

00:18:41,710 --> 00:18:45,880

myself and especially mari el how can

400
00:18:44,679 --> 00:18:47,139
they recognize you are you going to be

401
00:18:45,880 --> 00:18:49,389
walking around with a shirt that says

402
00:18:47,138 --> 00:18:51,069
it's me muy poo or a big hat or

403
00:18:49,388 --> 00:18:54,129
something like that well they can look

404
00:18:51,069 --> 00:18:56,740
at the videos yes I'm betting that now

405
00:18:54,130 --> 00:18:58,809
after we talked about this the Doppler

406
00:18:56,740 --> 00:19:02,200
effect one where I'm in the bathtub half

407
00:18:58,808 --> 00:19:05,319
naked well we'll probably get a lot of

408
00:19:02,200 --> 00:19:09,250
views now i don't think i'm going to

409
00:19:05,319 --> 00:19:11,168
walk in town naked but still you know

410
00:19:09,250 --> 00:19:13,419
you can you can see from from the videos

411
00:19:11,169 --> 00:19:17,820
well some of those parties get a bit

412
00:19:13,419 --> 00:19:21,038
wild you know well you know we'll see

413
00:19:17,819 --> 00:19:24,879
nah i think your tremendous Mario you

414
00:19:21,038 --> 00:19:26,528
sort of to me represent the real fun

415
00:19:24,880 --> 00:19:28,840
part of science where you so

416
00:19:26,528 --> 00:19:32,380
enthusiastic about presenting and you do

417
00:19:28,839 --> 00:19:34,720
it in such a funny way but at the same

418
00:19:32,380 --> 00:19:36,789
time people they can't help but learn

419
00:19:34,720 --> 00:19:39,460
the physics lesson which is involved and

420
00:19:36,788 --> 00:19:41,379
I also love the one where you have

421
00:19:39,460 --> 00:19:43,389
though now is it a tennis ball in a

422
00:19:41,380 --> 00:19:46,389
stockings which you're throwing back and

423
00:19:43,388 --> 00:19:49,028
forth to to illustrate Doppler right yes

424
00:19:46,388 --> 00:19:51,229
this is a the same one the same video

425
00:19:49,028 --> 00:19:55,009
yeah the same video that I start

426
00:19:51,230 --> 00:19:57,860
in the in the shower I also play with

427
00:19:55,009 --> 00:19:59,779
yeah with the ball in a stocking oh you

428

00:19:57,859 --> 00:20:01,459
start in the shower look she can't help

429
00:19:59,779 --> 00:20:03,649
herself folks she's in the bath she's in

430
00:20:01,460 --> 00:20:07,308
the shower I'm surprised she's wearing

431
00:20:03,650 --> 00:20:09,830
clothes at all but but it gets the

432
00:20:07,308 --> 00:20:11,720
message across so great you know people

433
00:20:09,829 --> 00:20:15,199
start watching from a different reason

434
00:20:11,720 --> 00:20:18,529
and they end up learning so hey why not

435
00:20:15,200 --> 00:20:19,730
I think you really you accomplishing

436
00:20:18,529 --> 00:20:21,589
what you set out to do which is

437
00:20:19,730 --> 00:20:24,410
fantastic and you're only young so

438
00:20:21,589 --> 00:20:26,569
you've got zillion years ahead of you to

439
00:20:24,410 --> 00:20:29,929
improve upon what you're doing and get

440
00:20:26,569 --> 00:20:35,298
the message out there so everybody after

441
00:20:29,929 --> 00:20:40,220
the show please go to ww mrta then that

442
00:20:35,298 --> 00:20:42,859

calm and then go to ww smart acts with

443

00:20:40,220 --> 00:20:46,130

an e comm check out Mario's videos

444

00:20:42,859 --> 00:20:48,349

they're fantastic and her sense of humor

445

00:20:46,130 --> 00:20:50,090

I think really helps carry the message

446

00:20:48,349 --> 00:20:52,939

so Morial thank you very much for

447

00:20:50,089 --> 00:20:55,189

talking to the skeptic zone today thank

448

00:20:52,940 --> 00:20:57,019

you thank you very much and thanks for

449

00:20:55,190 --> 00:20:59,298

everything you're doing this is a great

450

00:20:57,019 --> 00:21:03,889

podcast keep it up oh thank you very

451

00:20:59,298 --> 00:21:22,099

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

452

00:21:03,890 --> 00:21:24,500

a cake cake to the pie and a bathtub the

453

00:21:22,099 --> 00:21:27,709

skeptic the magazine from Australian

454

00:21:24,500 --> 00:21:30,500

skeptics now in its 29th year it's about

455

00:21:27,710 --> 00:21:32,179

to come out for the month of June's now

456

00:21:30,500 --> 00:21:35,480

in this issue we have a rare interview

457
00:21:32,179 --> 00:21:37,519
with actor and skeptic Stephen Fry a

458
00:21:35,480 --> 00:21:40,370
disturbing report on the activities of

459
00:21:37,519 --> 00:21:44,418
the Australian anti-vaccination network

460
00:21:40,369 --> 00:21:47,119
is breasts really best we look for

461
00:21:44,419 --> 00:21:49,910
ghosts in Adelaide visit the mind body

462
00:21:47,119 --> 00:21:52,219
and spirit festival hear about the young

463
00:21:49,910 --> 00:21:54,840
Australian skeptics and find out what

464
00:21:52,220 --> 00:21:58,019
happened to the fake popemobile

465
00:21:54,839 --> 00:22:00,659
a lot more to including the return of

466
00:21:58,019 --> 00:22:02,579
the skeptical crossword now if you're

467
00:22:00,660 --> 00:22:08,160
not a subscriber to the skeptic magazine

468
00:22:02,579 --> 00:22:10,109
head to ww skeptics come you click on

469
00:22:08,160 --> 00:22:12,860
the journal link and you can subscribe

470
00:22:10,109 --> 00:22:18,059
by there the skeptic the Journal of

471
00:22:12,859 --> 00:22:19,469
Australian skeptics and if I may some of

472
00:22:18,059 --> 00:22:22,200
you may know that I'm somewhat of an

473
00:22:19,470 --> 00:22:25,079
origami expert and together with my good

474
00:22:22,200 --> 00:22:28,830
friend Gary Clark we've released video

475
00:22:25,079 --> 00:22:32,490
origami onto iTunes for ipod touch and

476
00:22:28,829 --> 00:22:34,559
iphone go to itunes and search for video

477
00:22:32,490 --> 00:22:37,170
origami it's only a couple of dollars

478
00:22:34,559 --> 00:22:47,159
and you can get started folding straight

479
00:22:37,170 --> 00:22:49,769
away calling all skeptics in

480
00:22:47,160 --> 00:22:51,630
Christchurch New Zealand now you too can

481
00:22:49,769 --> 00:22:53,879
enjoy the worldwide crease that are

482
00:22:51,630 --> 00:22:56,190
skeptics in the pub just head to the

483
00:22:53,880 --> 00:22:57,990
twisted hop on the second monday in june

484
00:22:56,190 --> 00:23:01,140
to meet other like-minded drinkers and

485

00:22:57,990 --> 00:23:05,190
thinkers all the details can be found at

486
00:23:01,140 --> 00:23:09,540
meetup com / Christchurch dash skeptic

487
00:23:05,190 --> 00:23:12,450
stash in dash the dash pub so turn up

488
00:23:09,539 --> 00:23:15,109
drink up and tell them the skeptic sign

489
00:23:12,450 --> 00:23:15,110
sent you

490
00:23:31,140 --> 00:23:35,740
thank you for listening to this episode

491
00:23:33,400 --> 00:23:37,720
of the skeptic zone join us again next

492
00:23:35,740 --> 00:23:39,940
week where we'll give you a full report

493
00:23:37,720 --> 00:23:42,130
about our trip to melbourne doctor edgy

494
00:23:39,940 --> 00:23:44,980
myself Kylie Sturgis and Dave the happy

495
00:23:42,130 --> 00:23:46,990
singer where we meet up with the young

496
00:23:44,980 --> 00:23:48,819
Australian skeptics and give our

497
00:23:46,990 --> 00:23:50,769
Saturday night talk Saturday the

498
00:23:48,819 --> 00:23:53,769
thirtieth in fact if you're listening to

499
00:23:50,769 --> 00:23:56,019

this on Friday the 29th or Saturday the

500

00:23:53,769 --> 00:23:58,450

thirtieth in your in Melbourne you still

501

00:23:56,019 --> 00:24:03,129

have time to come and join us head to ww

502

00:23:58,450 --> 00:24:05,110

skeptic zone TV for details until next

503

00:24:03,130 --> 00:24:10,870

week this is Richard Saunders signing

504

00:24:05,109 --> 00:24:13,149

off from Sydney Australia you've been

505

00:24:10,869 --> 00:24:17,679

listening to the skeptic zone visit our

506

00:24:13,150 --> 00:24:20,170

website at www.skeptics.org on TV for

507

00:24:17,680 --> 00:24:22,440

comments contacts and extra video

508

00:24:20,170 --> 00:24:26,120

reports

509

00:24:22,440 --> 00:24:26,120

I skin

510

00:24:27,579 --> 00:24:29,639

Oh

511

00:24:41,220 --> 00:24:43,279

you