



Donato Giovannelli

*Reconstructing the Emergence & Evolution of
Metabolism: Ancestral & Acquired Metabolic
Pathways in Extant Genomes*

1
00:00:00,720 --> 00:00:11,120

[Music]

2
00:00:17,250 --> 00:00:13,980
before he star taiwan thank eric

3
00:00:20,130 --> 00:00:17,260
organizer forin baiting from good technique

4
00:00:22,440 --> 00:00:20,140
and collaborator in this work numerous

5
00:00:25,859 --> 00:00:22,450
species must theme will inform advisor

6
00:00:28,230 --> 00:00:25,869
costa Vetriano mike juglair ben jellun

7
00:00:31,819 --> 00:00:28,240
pof koskinen from other people and my

8
00:00:35,220 --> 00:00:31,829
tour de france aspect of this work

9
00:00:37,979 --> 00:00:35,230
still coming out remedy tre this is

10
00:00:41,040 --> 00:00:37,989
another versi sieti sia e cycle talk

11
00:00:43,139 --> 00:00:41,050
show redis into this morning view reding

12
00:00:45,540 --> 00:00:43,149
lord adair parts during past couple of

13
00:00:45,540 --> 00:00:47,430

days

14

00:00:56,639 --> 00:00:54,090

psycho not logo

15

00:00:58,500 --> 00:00:56,649

l'aspin too much time going through the

16

00:01:00,150 --> 00:00:58,510

basics because del tuo speaker just

17

00:01:02,849 --> 00:01:00,160

before nests of the great job in show

18

00:01:05,940 --> 00:01:02,859

with different aspect ai due al

19

00:01:08,520 --> 00:01:05,950

contribution and beat boat stinking good

20

00:01:11,700 --> 00:01:08,530

weekend contribute to the conversation

21

00:01:14,429 --> 00:01:11,710

about life emergence in evolution by

22

00:01:16,260 --> 00:01:14,439

using ex tanto organs only to the detriment to

23

00:01:19,649 --> 00:01:16,270

convinced other hand standing io non devo

24

00:01:23,100 --> 00:01:19,659

lusciano metabolism argens is important

25

00:01:26,310 --> 00:01:23,110

and rare number of technique top down

26
00:01:28,859 --> 00:01:26,320
typo the wikinews approach amos absurd

27
00:01:31,679 --> 00:01:28,869
show viewer debout limitation a

28
00:01:34,170 --> 00:01:31,689
process saces philogen ace molecular

29
00:01:37,080 --> 00:01:34,180
clock and generally inference from ex

30
00:01:40,410 --> 00:01:37,090
tanto organism age bolis moving down to

31
00:01:42,209 --> 00:01:40,420
back in time dell'ars aver severa lka

32
00:01:44,550 --> 00:01:42,219
via sweeney to keep in mind when we nuh

33
00:01:48,410 --> 00:01:44,560
des enel want to discuss brief lissa mob

34
00:01:51,270 --> 00:01:48,420
disguidi o solo the first one and his

35
00:01:54,840 --> 00:01:51,280
life emerge same planetary response

36
00:01:56,730 --> 00:01:54,850
billions yesterday from that there are

37
00:02:02,870 --> 00:01:56,740
many ways to you can't think about this

38
00:02:06,090 --> 00:02:02,880

one of the right for this talk is that

39

00:02:08,880 --> 00:02:06,100

life years di plan bad things to save

40

00:02:11,280 --> 00:02:08,890

and mental context eni che note xché

41

00:02:13,500 --> 00:02:11,290

peace planetari contest either solo wine

42

00:02:15,270 --> 00:02:13,510

and think about emergency evolution

43

00:02:17,610 --> 00:02:15,280

un metabolisme jua lucas many

44

00:02:21,990 --> 00:02:17,620

organisms right and try to push back in

45

00:02:23,309 --> 00:02:22,000

time the information br skip di mine in

46

00:02:25,649 --> 00:02:23,319

due in my work

47

00:02:28,709 --> 00:02:25,659

tipica lilius exprimo files extreme

48

00:02:32,300 --> 00:02:28,719

environment and smother to work back in

49

00:02:35,039 --> 00:02:32,310

time di sly the board frame takai sun

50

00:02:38,610 --> 00:02:35,049

about some of the extreme Schiavona

51
00:02:41,610 --> 00:02:38,620
wortmann et en us human se mons nayer

52
00:02:44,759 --> 00:02:41,620
organism occupied velina rossa awards

53
00:02:46,740 --> 00:02:44,769
extremes qua nel reality extreme files

54
00:02:49,440 --> 00:02:46,750
docchio pitt the majority of di anbar

55
00:02:54,629 --> 00:02:49,450
mental nations we are di extreme in a o

56
00:02:59,699 --> 00:02:54,639
nero ourednik are for life in thinking

57
00:03:03,030 --> 00:02:59,709
about this and t shirt mcbean like rini

58
00:03:05,879 --> 00:03:03,040
think that geotermale environment

59
00:03:08,520 --> 00:03:05,889
speciali bat extreme environment overall

60
00:03:10,800 --> 00:03:08,530
me i provider e good model to think

61
00:03:13,530 --> 00:03:10,810
about the condition and type o metaboli

62
00:03:15,899 --> 00:03:13,540
del werder solo place like offspring

63
00:03:18,179 --> 00:03:15,909

hydrothermal 20 psi a idro thermo al 20

64

00:03:21,300 --> 00:03:18,189

they are good potentially good model to

65

00:03:24,479 --> 00:03:21,310

understand what can we need however it

66

00:03:28,020 --> 00:03:24,489

something singh mind the force one is

67

00:03:30,839 --> 00:03:28,030

this heart mother environment day with

68

00:03:33,330 --> 00:03:30,849

our change in plane switching di spiti

69

00:03:35,819 --> 00:03:33,340

before in these days di sister act the

70

00:03:38,520 --> 00:03:35,829

easiest ex ample o one of the way our

71

00:03:41,460 --> 00:03:38,530

planet change e l'over time show niner

72

00:03:43,050 --> 00:03:41,470

top action other ways fork samp old

73

00:03:46,110 --> 00:03:43,060

changin mineral inventori del ris

74

00:03:49,890 --> 00:03:46,120

connected to this redox change now e nel

75

00:03:52,140 --> 00:03:49,900

look e this the first in scrubs to my

76

00:03:54,149 --> 00:03:52,150

mind lite to my researches place for

77

00:03:57,149 --> 00:03:54,159

some polight deep sia hydrothermal benz

78

00:03:59,309 --> 00:03:57,159

while the great place to this kind of

79

00:04:01,530 --> 00:03:59,319

studies they are two day and blink fluence

80

00:04:03,809 --> 00:04:01,540

ed by the oxygene the deep sea voters

81

00:04:05,819 --> 00:04:03,819

della presente sotto typo metaboli

82

00:04:08,399 --> 00:04:05,829

cinder ardere di adaptation degli organo

83

00:04:08,399 --> 00:04:11,699

surf is very different

84

00:04:20,099 --> 00:04:16,800

vadapter to change

85

00:04:24,089 --> 00:04:20,109

in planet vader has been tooway feedback

86

00:04:24,089 --> 00:04:26,999

on this

87

00:04:44,219 --> 00:04:41,610

spine

88

00:04:47,249 --> 00:04:44,229

tango going on four four billion years

89

00:04:49,860 --> 00:04:47,259

and his Istituto dei Suo always try to

90

00:04:52,019 --> 00:04:49,870

keep this in mind while ai look ex tanto

91

00:04:55,679 --> 00:04:52,029

organis un'altra chance tango de cannes

92

00:04:57,899 --> 00:04:55,689

contribute to our discussion Buona del

93

00:05:00,360 --> 00:04:57,909

problem is dead drops some of the signal

94

00:05:04,950 --> 00:05:00,370

uil looking at instant organisms and bing

95

00:05:07,769 --> 00:05:04,960

lost we will recently tried to compiler

96

00:05:10,619 --> 00:05:07,779

il diavel and bold age about geochimica lo

97

00:05:12,839 --> 00:05:10,629

ha rendered topic proxes a vele born to try

98

00:05:14,610 --> 00:05:12,849

to that the emergence of di ferma

99

00:05:17,760 --> 00:05:14,620

bolic pathway in the context aware

100

00:05:20,369 --> 00:05:17,770

planet evolution gli omessi lear the

101
00:05:22,980 --> 00:05:20,379
most of metabolic pathway lux holder del

102
00:05:25,469 --> 00:05:22,990
tubo in five million years

103
00:05:27,119 --> 00:05:25,479
most of the day dongo beyond howard

104
00:05:29,309 --> 00:05:27,129
burns testi metri point and that's

105
00:05:33,809 --> 00:05:29,319
profughi e byas bulbi e bye bye

106
00:05:35,939 --> 00:05:33,819
conservation of the oldest rock just

107
00:05:37,649 --> 00:05:35,949
making comment hugo ball goes asking

108
00:05:40,679 --> 00:05:37,659
earlier il looks like most of the

109
00:05:43,379 --> 00:05:40,689
innovation the wrap end user lyon

110
00:05:45,719 --> 00:05:43,389
cambrian explotion metabolism asp.net

111
00:05:49,079 --> 00:05:45,729
very early one hand diaspro leader asd

112
00:05:51,480 --> 00:05:49,089
big match innovation in cor metabolisms

113
00:05:55,200 --> 00:05:51,490

ever since we reveal us surprising paul

114

00:05:58,230 --> 00:05:55,210

watzlawick 3 keeping in mind that this

115

00:05:59,850 --> 00:05:58,240

heart proxes sawyer interpreting mas

116

00:06:02,969 --> 00:05:59,860

independent fraction nation dell'hard

117

00:06:06,269 --> 00:06:02,979

presente in rock record and martin king

118

00:06:08,219 --> 00:06:06,279

that was the times the working follows io

119

00:06:11,670 --> 00:06:08,229

dell'icsim i the theme song certo di extra da

120

00:06:13,889 --> 00:06:11,680

james am pretty sure that work beckham è

121

00:06:15,869 --> 00:06:13,899

a sun is doing ace with one day tell us

122

00:06:18,629 --> 00:06:15,879

about possible fraction a van straten effect comes out

123

00:06:20,670 --> 00:06:18,639

james we tried to push

124

00:06:23,399 --> 00:06:20,680

diesel iter forster to see if we can

125

00:06:25,889 --> 00:06:23,409

wait some of these ages driving cia leader

126

00:06:27,179 --> 00:06:25,899

ei jobs battery there are coming out or

127

00:06:28,279 --> 00:06:27,189

diarchia d'aver carignano delmetabole

128

00:06:34,200 --> 00:06:31,980

we tried to stu online awards best

129

00:06:36,179 --> 00:06:34,210

estimate for the emergence of

130

00:06:39,089 --> 00:06:36,189

metabolic difference age with best availble

131

00:06:41,579 --> 00:06:39,099

estimate of flight of the emergence of

132

00:06:44,159 --> 00:06:41,589

different ways and things they become

133

00:06:47,699 --> 00:06:44,169

player in media 3 in this ex size was

134

00:06:49,910 --> 00:06:47,709

that the majority of the aged a hot

135

00:06:52,520 --> 00:06:49,920

line up with any home non

136

00:06:57,190 --> 00:06:52,530

il mouse di stu means possibilisti

137

00:06:59,840 --> 00:06:57,200

things the first one is that perhaps di

138

00:07:02,420 --> 00:06:59,850

metabolism us bergen online

139

00:07:05,270 --> 00:07:02,430

there is either lost rojas not been

140

00:07:07,730 --> 00:07:05,280

disco verdi ed order tings and ben

141

00:07:10,460 --> 00:07:07,740

shuffled round so much del weekend

142

00:07:14,210 --> 00:07:10,470

taccioli connect new churches Giocamico

143

00:07:16,640 --> 00:07:14,220

al prox i will we see next angina free

144

00:07:20,660 --> 00:07:16,650

seen things by the way mutual exclusive

145

00:07:23,330 --> 00:07:20,670

in my mind omi 32 cialis good had with

146

00:07:25,850 --> 00:07:23,340

molecules archeology nielsen beckham e

147

00:07:28,070 --> 00:07:25,860

hasan another pipoli arduin wii looking

148

00:07:30,350 --> 00:07:28,080

at moder organi e by the look of the

149

00:07:33,590 --> 00:07:30,360

week end to end stenwick portion order

150

00:07:35,510 --> 00:07:33,600

gino i suns estro e which bag isna

151
00:07:39,140 --> 00:07:35,520
adaptation for change in planet switch

152
00:07:41,540 --> 00:07:39,150
con albin acquired letter now del there

153
00:07:43,610 --> 00:07:41,550
are several ways english weekend to

154
00:07:46,010 --> 00:07:43,620
this one or of approach a like the most

155
00:07:48,950 --> 00:07:46,020
is by combining different approach the

156
00:07:50,990 --> 00:07:48,960
week and use for example one all of

157
00:07:54,440 --> 00:07:51,000
comparative approaches genomics looking

158
00:07:57,470 --> 00:07:54,450
comparative of oud jeans eve volt

159
00:08:00,190 --> 00:07:57,480
overtime and or similar a bear suicidal thread

160
00:08:03,050 --> 00:08:00,200
genetics which is the reconstruction of

161
00:08:05,330 --> 00:08:03,060
gino all organism evolutionary story

162
00:08:07,910 --> 00:08:05,340
and reconstructive pattuire

163
00:08:10,490 --> 00:08:07,920

constructions acid present bay in

164

00:08:13,040 --> 00:08:10,500

an aura sun harry and ron distri approach

165

00:08:15,650 --> 00:08:13,050

che vi apparition together in veri power

166

00:08:18,710 --> 00:08:15,660

for framework witches col fai lo

167

00:08:21,830 --> 00:08:18,720

metabolic neodys technique spin pioneer

168

00:08:24,230 --> 00:08:21,840

byrds and braque manders don speak letter

169

00:08:27,860 --> 00:08:24,240

to the jan erik nel big bear flu

170

00:08:30,560 --> 00:08:27,870

in the way combina pro ching my work to

171

00:08:33,469 --> 00:08:30,570

the set and to his essence phallus metabolic

172

00:08:35,660 --> 00:08:33,479

approach and linking phylogenetic

173

00:08:39,290 --> 00:08:35,670

reconstruction e di organism breed e

174

00:08:41,380 --> 00:08:39,300

jim love with huttwil variances pathway

175

00:08:44,450 --> 00:08:41,390

topology to be able to win for

176
00:08:49,340 --> 00:08:44,460
evolutionary stereo vinta a quel rather

177
00:08:51,230 --> 00:08:49,350
than the single genes and pass fire

178
00:08:53,720 --> 00:08:51,240
sabina blind il tecnic ii

179
00:08:55,850 --> 00:08:53,730
drum group film col di acqui fish now

180
00:08:57,890 --> 00:08:55,860
disease and deep brunch in

181
00:09:00,920 --> 00:08:57,900
drum group which is big man show net dei

182
00:09:01,960 --> 00:09:00,930
twice ore di big match generoso early on

183
00:09:05,679 --> 00:09:01,970
this weekend

184
00:09:07,929 --> 00:09:05,689
in their li tolgo professor a tommy di

185
00:09:10,210 --> 00:09:07,939
branching in di scales means that went

186
00:09:12,340 --> 00:09:10,220
to phylogenetic construction this

187
00:09:16,150 --> 00:09:12,350
battery comes out in the reconstruction

188
00:09:18,429 --> 00:09:16,160

veri cloud based 3 audit this does not

189

00:09:20,259 --> 00:09:18,439

mean that these are ancient organs

190

00:09:23,350 --> 00:09:20,269

absolutely those are modern

191

00:09:25,720 --> 00:09:23,360

bove goodplanet web crabs

192

00:09:28,269 --> 00:09:25,730

outside does is that just the disli in the

193

00:09:30,970 --> 00:09:28,279

online game of long time ago

194

00:09:33,850 --> 00:09:30,980

mr t in the lot vans estral traits are

195

00:09:36,100 --> 00:09:33,860

expressed good modo fori and neeris north

196

00:09:38,920 --> 00:09:36,110

face the three talks this morning wharol

197

00:09:40,769 --> 00:09:38,930

talking about characteristic organs the

198

00:09:44,499 --> 00:09:40,779

roar part of this group

199

00:09:46,660 --> 00:09:44,509

this is a it no simplified philogen i

200

00:09:50,199 --> 00:09:46,670

discoveries questions is not now sun present

201
00:09:52,840 --> 00:09:50,209
you can see here the organisms already serd

202
00:09:56,410 --> 00:09:52,850
the stalker mo sufi of butter takai up

203
00:09:58,449 --> 00:09:56,420
here and most part of the work of the cam and

204
00:10:00,699 --> 00:09:58,459
hasan presenter of york this morning

205
00:10:03,040 --> 00:10:00,709
just dean of landings refers to hydrogen

206
00:10:05,829 --> 00:10:03,050
back court monfils but for the rest of

207
00:10:08,410 --> 00:10:05,839
the talk still lives lightly stronger

208
00:10:10,559 --> 00:10:08,420
focus to another organisms family

209
00:10:13,240 --> 00:10:10,569
witches di discharges to thermo vibrio

210
00:10:15,009 --> 00:10:13,250
nighter movibili o il parto one of the

211
00:10:17,740 --> 00:10:15,019
three family day you can see the light e

212
00:10:21,100 --> 00:10:17,750
di via rodi acquires the family

213
00:10:24,340 --> 00:10:21,110

westrich tyner oser presence of thermo

214

00:10:27,160 --> 00:10:24,350

files meaning dei lycan precious layman

215

00:10:29,470 --> 00:10:27,170

lorde mazzoli de luxe dai suns a

216

00:10:32,350 --> 00:10:29,480

hydrogen ed action e all reduced

217

00:10:35,259 --> 00:10:32,360

elemental sol for by kontras mano big

218

00:10:37,299 --> 00:10:35,269

difference we the rest of fino al latte

219

00:10:40,150 --> 00:10:37,309

di blu di here is that these guys al

220

00:10:43,840 --> 00:10:40,160

optional compulsory macro ai rom sud

221

00:10:47,110 --> 00:10:43,850

est distinct fisiologica al difference

222

00:10:50,530 --> 00:10:47,120

between the two vie di agli arbitri

223

00:10:53,259 --> 00:10:50,540

represents old and scribes pieces we are

224

00:10:56,139 --> 00:10:53,269

with and his group for which we all have

225

00:10:59,049 --> 00:10:56,149

mosley gene holmes is that we use the

226

00:11:01,689 --> 00:10:59,059

information contained in exten jeans ed

227

00:11:03,850 --> 00:11:01,699

information about the physiology to work

228

00:11:06,429 --> 00:11:03,860

beh quart e be able to reconstructive

229

00:11:08,799 --> 00:11:06,439

what the metabolism vederli a klose

230

00:11:11,319 --> 00:11:08,809

stanzas stornello klein e walk it back

231

00:11:14,060 --> 00:11:11,329

worgen potentially getting to the last

232

00:11:16,940 --> 00:11:14,070

koman anne sexton oriente filo

233

00:11:20,090 --> 00:11:16,950

similar approach kameya sun present to

234

00:11:25,250 --> 00:11:20,100

do with and science this time due sharp

235

00:11:28,130 --> 00:11:25,260

intyre network of metabolic ed time out

236

00:11:30,200 --> 00:11:28,140

this work ferme sul fil di butter da cai

237

00:11:33,950 --> 00:11:30,210

ed air siti hard and was di object of

238

00:11:35,720 --> 00:11:33,960

honor a san buon ravel e book is non

239

00:11:37,910 --> 00:11:35,730

include di most of staff ancona b

240

00:11:39,680 --> 00:11:37,920

talking about batta il look forward to

241

00:11:42,140 --> 00:11:39,690

interact with men include i team di

242

00:11:45,200 --> 00:11:42,150

essere construction by by angal speaker

243

00:11:48,980 --> 00:11:45,210

iter bit of how the work about presenze

244

00:11:52,550 --> 00:11:48,990

plug seantùr di heidi a squared bot by

245

00:11:54,710 --> 00:11:52,560

kameya in un ora guaio start to this

246

00:11:57,380 --> 00:11:54,720

work and use moder organs su walt

247

00:12:00,110 --> 00:11:57,390

backwards and willard bauret di Fondo Sara

248

00:12:02,660 --> 00:12:00,120

organis diradate with planet dei refusals

249

00:12:06,260 --> 00:12:02,670

in sweeney to keep in mind one ad thinks

250

00:12:09,290 --> 00:12:06,270

di we need overcome genome osais mosaici

251

00:12:12,170 --> 00:12:09,300

esp desis ii this means that ex tangi

252

00:12:15,050 --> 00:12:12,180

non sar collection of different way with

253

00:12:17,690 --> 00:12:15,060

gino made of this is a very schematic

254

00:12:19,910 --> 00:12:17,700

representation of three modern organisms

255

00:12:22,610 --> 00:12:19,920

are here the lines leading to di organi

256

00:12:24,680 --> 00:12:22,620

walking back end in un mostri o bulbi

257

00:12:28,010 --> 00:12:24,690

interesting and reconstructive ians

258

00:12:31,220 --> 00:12:28,020

estero state all organism i laccioli

259

00:12:34,160 --> 00:12:31,230

vertical inheritance direct the sands of

260

00:12:36,170 --> 00:12:34,170

information dell'aran una vera del

261

00:12:38,840 --> 00:12:36,180

waiting list gina a change over time

262

00:12:41,120 --> 00:12:38,850

for zampolino vision scioni ares

263

00:12:43,460 --> 00:12:41,130

duplichu shawn and differences shaun like a

264

00:12:48,290 --> 00:12:43,470

me bloody justin ford in science order

265

00:12:51,140 --> 00:12:48,300

vasti si e psycho or get down horw ann

266

00:12:53,420 --> 00:12:51,150

arbor lateral gene transfer saw the way

267

00:12:56,090 --> 00:12:53,430

you look di ex tank organisms fang

268

00:12:58,910 --> 00:12:56,100

mixing non ho voltri hold'em and unit try

269

00:13:02,090 --> 00:12:58,920

to the construct auto gatward practice

270

00:13:03,860 --> 00:13:02,100

his organ tics vibrio screen the

271

00:13:06,140 --> 00:13:03,870

rye mansion by four

272

00:13:08,600 --> 00:13:06,150

witech and luca listino disease and

273

00:13:12,890 --> 00:13:08,610

representation of its entirety gino and

274

00:13:15,230 --> 00:13:12,900

nardin compared to hold sequencer wino

275

00:13:18,730 --> 00:13:15,240

inside da venerable database al diavel and

276

00:13:21,920 --> 00:13:18,740

bogino era already stai lighting by

277

00:13:24,230 --> 00:13:21,930

similarity to other groups what you can

278

00:13:26,650 --> 00:13:24,240

not probably rhythm stop di teus barra a

279

00:13:28,749 --> 00:13:26,660

will highlights mode sector for you

280

00:13:31,389 --> 00:13:28,759

the first one is this one e booth sixty

281

00:13:33,910 --> 00:13:31,399

percent of gino within the ferme vibrio

282

00:13:36,009 --> 00:13:33,920

gino sixty fi presented by jeanseria

283

00:13:39,819 --> 00:13:36,019

razzoli very similar to del resto bis

284

00:13:41,889 --> 00:13:39,829

family the majority of similiari thys

285

00:13:44,769 --> 00:13:41,899

tris family this probably representing

286

00:13:47,610 --> 00:13:44,779

good wine inherited vertical but even

287

00:13:51,550 --> 00:13:47,620

more surprise l'ing about forti percent

288

00:13:53,920 --> 00:13:51,560

year forti serve al presente ad china con

289

00:13:58,780 --> 00:13:53,930

l'intermot vibio like this means that if

290

00:14:01,179 --> 00:13:58,790

you the best similarities within the

291

00:14:03,910 --> 00:14:01,189

database is it south and has nothing

292

00:14:05,740 --> 00:14:03,920

else after large i lidi will be hypothetical

293

00:14:07,660 --> 00:14:05,750

al protein for which we have no molo

294

00:14:10,689 --> 00:14:07,670

xing database indesit fairley comon

295

00:14:13,509 --> 00:14:10,699

design arjun mount of information day we

296

00:14:15,929 --> 00:14:13,519

donno fuori da sé where he came from and

297

00:14:19,809 --> 00:14:15,939

and the pretty significant portion gear

298

00:14:23,199 --> 00:14:19,819

hopkins the rebels best next relative and

299

00:14:25,389 --> 00:14:23,209

smos similar sequence santin there is no

300

00:14:27,699 --> 00:14:25,399

even in via wi fi che cales fillon

301

00:14:30,220 --> 00:14:27,709

discomfort alle outside.in things like

302

00:14:33,519 --> 00:14:30,230

delta epsilon pro the buck tiria firmi

303

00:14:35,590 --> 00:14:33,529

cuteness diarchia or other dispera p's

304

00:14:38,889 --> 00:14:35,600

me represent horizontal gen transfer

305

00:14:41,110 --> 00:14:38,899

santander is not share with your in

306

00:14:43,540 --> 00:14:41,120

media neighbor phylogenetic le speaking

307

00:14:46,150 --> 00:14:43,550

bar comes from out side story thinking

308

00:14:49,569 --> 00:14:46,160

by sindh blood and present by before we

309

00:14:53,460 --> 00:14:49,579

may have inheritance innovation within

310

00:14:56,019 --> 00:14:53,470

by gino horizontal gen trans now deesis

311

00:14:58,210 --> 00:14:56,029

snapshot water movibile genome she's

312

00:15:00,790 --> 00:14:58,220

like dal refusal of 6 max of science for

313

00:15:03,790 --> 00:15:00,800

old gino and indie acquire e io che si

314

00:15:06,490 --> 00:15:03,800

olo damian this color vertical group

315

00:15:08,590 --> 00:15:06,500

stand by family io so of his future

316

00:15:10,900 --> 00:15:08,600

drums we will stick biblio family is

317

00:15:13,329 --> 00:15:10,910

still on the feedback for takai wired

318

00:15:15,610 --> 00:15:13,339

before after endemol by ad are you can

319

00:15:18,549 --> 00:15:15,620

see the days velina lipstick jeans

320

00:15:21,610 --> 00:15:18,559

levi's tour con i seggio non vera spin

321

00:15:24,460 --> 00:15:21,620

warms a tubes compared to dialer and

322

00:15:27,129 --> 00:15:24,470

dark pop song here are ginther share ai

323

00:15:28,990 --> 00:15:27,139

similarity with one another e uk e il sì

324

00:15:31,240 --> 00:15:29,000

del dl sapi small sector yard market

325

00:15:33,819 --> 00:15:31,250

milan del ris common to all of them

326

00:15:36,249 --> 00:15:33,829

uccisa jolie common to all of them

327

00:15:39,340 --> 00:15:36,259

otherwise routing ars look

328

00:15:40,300 --> 00:15:39,350

different writings now this means by doing this

329

00:15:40,300 --> 00:15:43,269

exercise

330

00:16:03,519 --> 00:16:00,910

vision è in due in this work i realized

331

00:16:08,800 --> 00:16:03,529

that the large portion of di acqua e

332

00:16:11,620 --> 00:16:08,810

reed gino lisa ciali desktop with veri o

333

00:16:15,310 --> 00:16:11,630

xvi da east forum Giocamico fises or

334

00:16:17,620 --> 00:16:15,320

with oxygen is like organisms and è ben i

335

00:16:20,110 --> 00:16:17,630

capi life for long time with and core

336

00:16:22,660 --> 00:16:20,120

metabolism and and wine oxygen che

337

00:16:25,240 --> 00:16:22,670

online duri in parit evolution get to

338

00:16:27,280 --> 00:16:25,250

deal with either inventing saf org

339

00:16:29,890 --> 00:16:27,290

borrowing staff from other people like

340

00:16:32,260 --> 00:16:29,900

samp holden ai 33 d'action pathway

341

00:16:33,820 --> 00:16:32,270

because this organism sizing sol for

342

00:16:35,860 --> 00:16:33,830

the use of night riad

343

00:16:37,990 --> 00:16:35,870

we have strong evidence that comes from

344

00:16:41,380 --> 00:16:38,000

another line delta proto battery

345

00:16:43,930 --> 00:16:41,390

witches e lynette dell'emerge slater now

346

00:16:46,030 --> 00:16:43,940

o boldis pathway week and try to re

347

00:16:48,370 --> 00:16:46,040

construct dell'educazione ristori and

348

00:16:52,510 --> 00:16:48,380

since this is another versi si e psycho

349

00:16:55,210 --> 00:16:52,520

ancona focus on this 9 una speaker lot

350

00:16:58,120 --> 00:16:55,220

about guai roversi si è il cycle is

351
00:17:00,670 --> 00:16:58,130
appealing per spinello by michael hicks

352
00:17:03,700 --> 00:17:00,680
just before suo doni to get into it

353
00:17:06,010 --> 00:17:03,710
manager schemes amor information and to

354
00:17:08,410 --> 00:17:06,020
face of the road activities ea cycle

355
00:17:11,470 --> 00:17:08,420
bert dei camei asana crumbles the

356
00:17:13,809 --> 00:17:11,480
touchstone this this is what is known as

357
00:17:16,090 --> 00:17:13,819
the one step variant of axes metric

358
00:17:18,490 --> 00:17:16,100
variant order vesti si è cycle analysis

359
00:17:20,500 --> 00:17:18,500
present in the embankment amber or battery

360
00:17:23,140 --> 00:17:20,510
but we of purchases cales family sen

361
00:17:25,000 --> 00:17:23,150
outside and resources typical cycle de rabin

362
00:17:27,669 --> 00:17:25,010
discovery del star by e dei nano xvi

363
00:17:32,410 --> 00:17:27,679

janic photo too much air leon by psycho

364

00:17:34,660 --> 00:17:32,420

list characters set by the one step one

365

00:17:38,830 --> 00:17:34,670

step carbox nation outlook schluter aid

366

00:17:41,919 --> 00:17:38,840

and one step cleavage on site wright by

367

00:17:46,000 --> 00:17:41,929

one of design derisi usa s diagnostic

368

00:17:49,690 --> 00:17:46,010

ford cycle from ancona refer to this type

369

00:17:52,600 --> 00:17:49,700

o vesti sia i cycles to to one step per

370

00:17:54,780 --> 00:17:52,610

artists ai cycle throughout but i talk

371

00:17:56,770 --> 00:17:54,790

sneijder versione stud there is the one

372

00:17:58,720 --> 00:17:56,780

camelias andrius di ministri e

373

00:18:01,270 --> 00:17:58,730

construction is also known as the

374

00:18:03,730 --> 00:18:01,280

simmetrico to state variants and you can

375

00:18:05,440 --> 00:18:03,740

see the year instead carbox nation at

376

00:18:08,560 --> 00:18:05,450

war volute rete in opere tele in two

377

00:18:10,450 --> 00:18:08,570

step guide ocse lucy nate intermediae

378

00:18:12,760 --> 00:18:10,460

red sametime writes jobs highlights

379

00:18:15,460 --> 00:18:12,770

performer in two step by two di stick

380

00:18:17,650 --> 00:18:15,470

and science for the rest of the talk

381

00:18:21,810 --> 00:18:17,660

still hughes and mort cartoonist view id

382

00:18:25,330 --> 00:18:21,820

to cycle while you can see the one step

383

00:18:27,460 --> 00:18:25,340

single and science n tu stai pr web tool

384

00:18:29,710 --> 00:18:27,470

online hard black and downing two steps

385

00:18:33,520 --> 00:18:29,720

and naro things we non there has been man

386

00:18:36,669 --> 00:18:33,530

show net day is that one step version

387

00:18:39,669 --> 00:18:36,679

emergence of two step forson from fusion

388

00:18:41,950 --> 00:18:39,679

at distance i mean to by sr james and

389

00:18:45,010 --> 00:18:41,960

works at takeover odia there is his

390

00:18:48,669 --> 00:18:45,020

work has been cari and dal times l on the

391

00:18:51,580 --> 00:18:48,679

man who we know the disc version here

392

00:18:54,730 --> 00:18:51,590

evolves by fan this one by one by inconvenience

393

00:18:56,890 --> 00:18:54,740

therefore gesap dda penguin by termoli bree

394

00:18:59,470 --> 00:18:56,900

lynette dda by within by acqui fi cales

395

00:19:02,020 --> 00:18:59,480

e morde nenni think and we try to work

396

00:19:04,210 --> 00:19:02,030

is back end stand buggles by original

397

00:19:07,000 --> 00:19:04,220

version presents the bass by acqui fica

398

00:19:10,680 --> 00:19:07,010

was so in many ways deesis complementarie

399

00:19:13,539 --> 00:19:10,690

di tu dia dell approach before it is

400

00:19:15,549 --> 00:19:13,549

very clear that if we look to the world

401
00:19:18,580 --> 00:19:15,559
group della using the rovesti sia e

402
00:19:20,860 --> 00:19:18,590
cycle the two step person is limit to

403
00:19:24,669 --> 00:19:20,870
di acqui fica cea within di acqui fissi

404
00:19:26,919 --> 00:19:24,679
a wire wilde one step cycles widespread

405
00:19:31,299 --> 00:19:26,929
everyone else guidi exception high cai

406
00:19:34,090 --> 00:19:31,309
era here they guide us the reason for this

407
00:19:36,460 --> 00:19:34,100
perhaps the reason and intermedia e thor

408
00:19:39,190 --> 00:19:36,470
establish or human bien times have shore

409
00:19:41,350 --> 00:19:39,200
what the reason kurds trap dissolves

410
00:19:43,960 --> 00:19:41,360
cell phone on di scarce he we are michael

411
00:19:45,850 --> 00:19:43,970
hicks overtime batis clear that one step

412
00:19:49,030 --> 00:19:45,860
as completely tekken over from the two

413
00:19:51,310 --> 00:19:49,040

step to try to understand wen enaudi

414

00:19:54,539 --> 00:19:51,320

sapin instead of focusing on single

415

00:19:57,340 --> 00:19:54,549

jeans o guidance nas bean e pathway level

416

00:20:00,190 --> 00:19:57,350

filogenetiche reconstruction su youtube

417

00:20:02,770 --> 00:20:00,200

all de genes other versi si è cycle

418

00:20:04,840 --> 00:20:02,780

auguri constructed che il filò janis for

419

00:20:07,900 --> 00:20:04,850

all of them

420

00:20:11,760 --> 00:20:07,910

you can see on the left side of the art

421

00:20:14,920 --> 00:20:11,770

of being the force on the go stromasys

422

00:20:18,040 --> 00:20:14,930

coetus the mayor and in the lotto games week

423

00:20:21,280 --> 00:20:18,050

end cover monossili forvenire il filo

424

00:20:23,500 --> 00:20:21,290

meaning that it appears del ticino on

425

00:20:27,280 --> 00:20:23,510

this side of di hardware been vertical

426

00:20:29,260 --> 00:20:27,290

inedite within dalle linea meaning the

427

00:20:32,020 --> 00:20:29,270

wire la che li presente in the last anne

428

00:20:34,180 --> 00:20:32,030

sexton while on the other side teen star

429

00:20:38,410 --> 00:20:34,190

to get dell'iter bit more messi entics

430

00:20:40,870 --> 00:20:38,420

di at work complicate so tu tu tu

431

00:20:42,820 --> 00:20:40,880

mechanics ampolo valtur think about this

432

00:20:45,760 --> 00:20:42,830

from the phylogenetic point of view and

433

00:20:48,610 --> 00:20:45,770

bring it back ancona focus only on the

434

00:20:52,780 --> 00:20:48,620

atp site red lights which is designed

435

00:20:55,120 --> 00:20:52,790

james dell'iss indicative old one step

436

00:20:58,570 --> 00:20:55,130

version roversi csi cold eris widespread

437

00:21:00,310 --> 00:20:58,580

handan result from the fusion disney on

438

00:21:03,250 --> 00:21:00,320

line risulerà from the fusion of duty

439

00:21:05,920 --> 00:21:03,260

jeans disease and filogenetiche le

440

00:21:10,690 --> 00:21:05,930

construction of this thing you can see

441

00:21:13,690 --> 00:21:10,700

ed topi a user jeans from di organi del

442

00:21:16,420 --> 00:21:13,700

not have the one step fust vader eiusdem

443

00:21:19,210 --> 00:21:16,430

sun out group to try to root di street

444

00:21:21,640 --> 00:21:19,220

once the web fusion a penn e uk e nei

445

00:21:23,980 --> 00:21:21,650

media tris i bei reading the names that

446

00:21:26,530 --> 00:21:23,990

the most baysal group here is not the

447

00:21:28,390 --> 00:21:26,540

del neighbor all'estero mind ed acqui

448

00:21:30,790 --> 00:21:28,400

feci hard disk rupia ladies group sia

449

00:21:32,770 --> 00:21:30,800

del filogenetica league together resa

450

00:21:34,300 --> 00:21:32,780

organi but you can see that this group

451
00:21:37,210 --> 00:21:34,310
year in the middle suggesting del the

452
00:21:39,190 --> 00:21:37,220
potential invention of the one step atp

453
00:21:41,380 --> 00:21:39,200
site reed cleavage a penn state i

454
00:21:45,340 --> 00:21:41,390
train the floor di ales ordini

455
00:21:46,840 --> 00:21:45,350
traspira and while howard group ir

456
00:21:48,400 --> 00:21:46,850
interviews of stadiums che wired

457
00:21:51,070 --> 00:21:48,410
constructing where do once the piece

458
00:21:53,500 --> 00:21:51,080
piece dauni ar e niesen ester with in

459
00:21:55,870 --> 00:21:53,510
the rest of di organi smart group

460
00:21:59,440 --> 00:21:55,880
Potenza di suggesting lateral gene

461
00:22:02,050 --> 00:21:59,450
transfer haven the transfer capacity of

462
00:22:05,860 --> 00:22:02,060
one step reaction north cycle in all

463
00:22:08,950 --> 00:22:05,870

group so probable there has been the

464

00:22:10,870 --> 00:22:08,960

gap year and just the dress no vertical

465

00:22:14,100 --> 00:22:10,880

continuity in a good is happening on

466

00:22:16,780 --> 00:22:14,110

this side of the cycle now this type of

467

00:22:18,400 --> 00:22:16,790

high di best wishes zanta gene transfer

468

00:22:21,760 --> 00:22:18,410

within the group is also support

469

00:22:23,770 --> 00:22:21,770

by synthetic analysis jordi gene holmes

470

00:22:26,740 --> 00:22:23,780

the looking large porsche north china a

471

00:22:29,620 --> 00:22:26,750

count ninguno rumor jeans of the

472

00:22:32,560 --> 00:22:29,630

lateral past dow and the tools the

473

00:22:35,290 --> 00:22:32,570

spot of the tus million top of atp site

474

00:22:38,050 --> 00:22:35,300

live together with eyesight ride

475

00:22:40,300 --> 00:22:38,060

hydrogen e al coni hydrate guicciardi

476

00:22:44,380 --> 00:22:40,310

other and science symbol on the right

477

00:22:48,870 --> 00:22:44,390

side order vesti si è cycle e netto

478

00:22:52,060 --> 00:22:48,880

pierce del the binh pasta a mondi ad are

479

00:22:54,030 --> 00:22:52,070

one swedan di saxo science for old jeans

480

00:22:57,150 --> 00:22:54,040

there are we tried to re construct

481

00:22:59,680 --> 00:22:57,160

evolutionary hysteria weah phylogenetic

482

00:23:01,750 --> 00:22:59,690

physiological I 'information the question

483

00:23:05,110 --> 00:23:01,760

ace che we tried to put this information

484

00:23:07,870 --> 00:23:05,120

together news file metabolica procedure

485

00:23:11,650 --> 00:23:07,880

construct evolutionary steri obi spa

486

00:23:14,610 --> 00:23:11,660

twain this group disease and cartoon verso

487

00:23:17,950 --> 00:23:14,620

nord semper show by ubi forio che sia

488

00:23:20,680 --> 00:23:17,960

termo vibrio ater

489

00:23:24,490 --> 00:23:20,690

marcelline hydrogen lines to amplify jware lines

490

00:23:27,430 --> 00:23:24,500

tac al sun organi introduces himself this is

491

00:23:29,050 --> 00:23:27,440

very those a razzoli a mancanze ning out

492

00:23:31,930 --> 00:23:29,060

all the information about di aix en

493

00:23:33,670 --> 00:23:31,940

thorgan izmir just focus on di split

494

00:23:36,730 --> 00:23:33,680

dell'idv what we care cover franchi

495

00:23:39,340 --> 00:23:36,740

logical and this is the same exact split

496

00:23:42,730 --> 00:23:39,350

of sure you before di anso with just

497

00:23:44,590 --> 00:23:42,740

looking simplified version now once we

498

00:23:46,990 --> 00:23:44,600

have this weekend start plugin

499

00:23:49,150 --> 00:23:47,000

fisiologica relevant information on top

500

00:23:54,130 --> 00:23:49,160

of the three forex in naples era un putin

501
00:23:56,560 --> 00:23:54,140
e bar were moder ex tant anaerobic

502
00:23:58,360 --> 00:23:56,570
versus michael aerobic smart organs and

503
00:24:01,420 --> 00:23:58,370
sanford weekend jean paul meeting

504
00:24:03,850 --> 00:24:01,430
screen files hyper thermo files weekend

505
00:24:07,420 --> 00:24:03,860
ue number of the week and put the use

506
00:24:10,330 --> 00:24:07,430
oxygen the dead notes on any other

507
00:24:11,980 --> 00:24:10,340
things we go nature and stupid extract

508
00:24:15,040 --> 00:24:11,990
information week end baud pathway

509
00:24:18,100 --> 00:24:15,050
genomics sawyer is the two step verso

510
00:24:28,500 --> 00:24:18,110
nord pathway in di acquisition and one

511
00:24:35,750 --> 00:24:31,400
by

512
00:24:38,540 --> 00:24:35,760
for that the one step verso lo sliding

513
00:24:43,010 --> 00:24:38,550

center frame outside qui concludes that by

514

00:24:45,560 --> 00:24:43,020

hans estro no dog districhi arconte

515

00:24:48,770 --> 00:24:45,570

need to step version pretty much like

516

00:24:48,770 --> 00:24:50,000

the modern

517

00:24:55,520 --> 00:24:52,010

g in

518

00:24:58,010 --> 00:24:55,530

trance there was also another lateral

519

00:25:01,970 --> 00:24:58,020

gene transfer band the transfer the same

520

00:25:04,850 --> 00:25:01,980

one step mondi other side naudin wine

521

00:25:07,160 --> 00:25:04,860

all this is very well support vai del

522

00:25:10,220 --> 00:25:07,170

numero stride con straten del synth enic

523

00:25:10,220 --> 00:25:12,680

analysis moving one step back

524

00:25:18,230 --> 00:25:14,990

possibility sia they had to step

525

00:25:21,290 --> 00:25:18,240

presente al n blues lost wenski her and

526

00:25:28,430 --> 00:25:21,300

one sia due bands in which alford year

527

00:25:30,620 --> 00:25:28,440

get lost or death of this is true e col

528

00:25:32,480 --> 00:25:30,630

be true that the early al brunch also

529

00:25:34,880 --> 00:25:32,490

ponte need to step assume in the water

530

00:25:36,380 --> 00:25:34,890

roversi e cycle but we do a find the

531

00:25:38,690 --> 00:25:36,390

two step anywhere else on the three

532

00:25:42,590 --> 00:25:38,700

online are good popsicles concluder

533

00:25:45,470 --> 00:25:42,600

with our collaborator is that old

534

00:25:49,160 --> 00:25:45,480

version based trio of artifices and isa

535

00:25:53,030 --> 00:25:49,170

jolie and b works cycle will treat is by

536

00:25:55,160 --> 00:25:53,040

promiscuous if james now this is an idea is

537

00:25:58,040 --> 00:25:55,170

very consistent with what kameya

538

00:26:02,810 --> 00:25:58,050

sanction where you have been is single

539

00:26:03,200 --> 00:26:02,820

feature set yms deris catalyzer

540

00:26:06,470 --> 00:26:03,210

bot

541

00:26:09,350 --> 00:26:06,480

arc other vesti si è cycle e non site in

542

00:26:11,420 --> 00:26:09,360

cambia consistent with what u n'ora samos

543

00:26:14,930 --> 00:26:11,430

present and in the meadows to proceed

544

00:26:17,150 --> 00:26:14,940

this is a de giosa from in real sin

545

00:26:19,340 --> 00:26:17,160

disney sud e nomini autonomi scholes

546

00:26:21,430 --> 00:26:19,350

things are bad reaction medi

547

00:26:24,110 --> 00:26:21,440

irreversible defendi gaudio vernò di

548

00:26:26,570 --> 00:26:24,120

guardarsi de tisi e psycho force with

549

00:26:27,950 --> 00:26:26,580

her spector versi csi con quel i link

550

00:26:30,890 --> 00:26:27,960

degli assoli e marques together and the

551

00:26:34,310 --> 00:26:30,900

falling se in place io sul web gear e

552

00:26:36,200 --> 00:26:34,320

cycle the wall scat the ice even set or

553

00:26:38,600 --> 00:26:36,210

promiscuous sand science and candy candy

554

00:26:42,500 --> 00:26:38,610

rober load i cui a rambo team luke

555

00:26:44,899 --> 00:26:42,510

hobbs data redacted direction des i

556

00:26:48,489 --> 00:26:44,909

think is also true consistent

557

00:26:52,339 --> 00:26:48,499

more than like purpose by roseanne eric

558

00:26:57,619 --> 00:26:52,349

and bass or the metabolic trade and monroe

559

00:27:03,169 --> 00:26:57,629

boost type of network ai teen king

560

00:27:11,089 --> 00:27:03,179

features erica scherl speaker between us

561

00:27:18,919 --> 00:27:11,099

to speak about our partners and that if

562

00:27:23,089 --> 00:27:18,929

i ever gonna get closer 96 big brand

563

00:27:26,359 --> 00:27:23,099

standing ex organi top from a

564

00:27:29,719 --> 00:27:26,369

margin approach bottom up pro starting to

565

00:27:33,320 --> 00:27:29,729

make this bridge eric lo stalking about

566

00:27:42,200 --> 00:27:33,330

minitour released artù integrator single

567

00:27:42,799 --> 00:27:42,210

frame work getting by law metabolica

568

00:27:46,460 --> 00:27:42,809

prof

569

00:27:46,470 --> 00:27:52,749

perhaps linking together we things like

570

00:28:01,369 --> 00:27:59,089

the protein folk emerge stalking horse

571

00:28:04,399 --> 00:28:01,379

di avalle ability of co factor

572

00:28:06,919 --> 00:28:04,409

odm ultima origin belec trombare for

573

00:28:10,489 --> 00:28:06,929

cash online the moment mi gonna be able

574

00:28:13,180 --> 00:28:10,499

to link di sting studi eder dostum su

575

00:28:16,489 --> 00:28:13,190

will become power folto rinaldi nas

576

00:28:18,729 --> 00:28:16,499

bridge top top da nel bottom up and

577

00:28:20,899 --> 00:28:18,739

drive julius constrained both from

578

00:28:23,629 --> 00:28:20,909

geochimica al geologica al perspective

579

00:28:28,789 --> 00:28:23,639

and from what ex tanta organisms tu sei

580

00:28:33,379 --> 00:28:28,799

un early metabolismi di just wanna thank

581

00:28:35,359 --> 00:28:33,389

mai collaborators funding serse si

582

00:28:41,139 --> 00:28:35,369

istituisce nel gulf i think also

583

00:28:41,149 --> 00:29:21,970

also this year commander

584

00:29:21,980 --> 00:29:39,240

[Music]

585

00:29:39,250 --> 00:29:49,830

2

586

00:29:58,630 --> 00:29:53,740

great also because we see sol for

587

00:30:01,480 --> 00:29:58,640

reduction b widespread lines of the tree

588

00:30:03,909 --> 00:30:01,490

of life ball diarchia said and battery

589

00:30:07,150 --> 00:30:03,919

said and this would suggest that is

590

00:30:10,030 --> 00:30:07,160

important pathway for respiration lyon

591

00:30:12,100 --> 00:30:10,040

unfortunately world group on wii focus

592

00:30:14,230 --> 00:30:12,110

costas laboratories in rhodes amplifies the

593

00:30:15,880 --> 00:30:14,240

being epsilon lawn battery andrea

594

00:30:18,039 --> 00:30:15,890

very different evolutionary goshawks

595

00:30:20,169 --> 00:30:18,049

bascelli together vairo minds dei online

596

00:30:22,510 --> 00:30:20,179

specials del thermo fire to do sol for

597

00:30:25,419 --> 00:30:22,520

respiration unfortunately for this

598

00:30:28,299 --> 00:30:25,429

groups the patriots ufo respiration is

599

00:30:29,470 --> 00:30:28,309

not now and student o poli in

600

00:30:32,409 --> 00:30:29,480

collaboration with constance been

601
00:30:34,799 --> 00:30:32,419
working to try to this at war powers of

602
00:30:37,780 --> 00:30:34,809
respiration intermot vibrio specification

603
00:30:40,000 --> 00:30:37,790
batting server i complex and we can not

604
00:30:41,890 --> 00:30:40,010
find many of this the week in pointing

605
00:30:43,900 --> 00:30:41,900
intermot video and domo lux in other

606
00:30:45,880 --> 00:30:43,910
places wiiware just as killed if in

607
00:30:49,840 --> 00:30:45,890
these 8 nyon horasan strong rmo on

608
00:30:52,990 --> 00:30:49,850
feedback for sky great grandfather neither wired

609
00:30:56,400 --> 00:30:53,000
spies on full size big di only non

610
00:30:59,020 --> 00:30:56,410
electron accept order im i think he he

611
00:31:01,060 --> 00:30:59,030
is gonna be crucial to try to angst

612
00:31:03,430 --> 00:31:01,070
hoary of energetic metabolism

613
00:31:05,860 --> 00:31:03,440

unfortunately and drive the ot but walton

614

00:31:09,520 --> 00:31:05,870

ai tre tra d'accio side games just

615

00:31:16,900 --> 00:31:12,460

go you have personal thread that's

616

00:31:20,580 --> 00:31:16,910

reduction maybe e merli pipe respiri

617

00:31:37,890 --> 00:31:20,590

shannon e 66 the woods anjas and

618

00:31:37,900 --> 00:31:55,500

donated a question nebida for fighting

619

00:31:55,510 --> 00:32:13,050

bonsai di garage di expert antonio scano

620

00:32:13,060 --> 00:32:51,660

genre quick actions of the

621

00:33:00,970 --> 00:32:57,330

inter family fashion week and talking about it

622

00:33:05,860 --> 00:33:00,980

don't think that to step towards devo 7

623

00:33:09,520 --> 00:33:05,870

think of us the future back in time we

624

00:33:13,840 --> 00:33:09,530

want to pinpoint on this knot berardi pin

625

00:33:17,700 --> 00:33:13,850

to treat look

626
00:33:22,899 --> 00:33:17,710
and we think outing web of friends and

627
00:33:24,789 --> 00:33:22,909
gas also show promiscuity

628
00:33:27,070 --> 00:33:24,799
for wii facts on the pil looking for us

629
00:33:29,349 --> 00:33:27,080
acli and two step based variant of

630
00:33:31,389 --> 00:33:29,359
artifice but for atlantic bird and slot

631
00:33:35,529 --> 00:33:31,399
marwijk all rom in what you can a como

632
00:33:38,680 --> 00:33:35,539
dei in un ora sano someda evidence in

633
00:33:40,330 --> 00:33:38,690
looking is similar thissbi twins amaldi

634
00:33:42,940 --> 00:33:40,340
without together with james present in

635
00:33:43,539 --> 00:33:42,950
diarchy off-field similar by valium

636
00:33:46,119 --> 00:33:43,549
dei gol

637
00:33:49,109 --> 00:33:46,129
mary what i drive and sent ficale

638
00:33:52,389 --> 00:33:49,119

staggered bob king james frain samp old

639

00:33:53,889 --> 00:33:52,399

airbag carbox the ace and similarity from

640

00:33:56,289 --> 00:33:53,899

the term ovidio group studies virtue

641

00:33:59,379 --> 00:33:56,299

groovessero round fortitu per semper

642

00:34:02,619 --> 00:33:59,389

les soda become souls issues re

643

00:34:04,899 --> 00:34:02,629

constructing on how many homologous sites

644

00:34:08,440 --> 00:34:04,909

and how similari durini think those

645

00:34:10,180 --> 00:34:08,450

things are welcome permi buona ed una

646

00:34:13,119 --> 00:34:10,190

and reconstruction high flyin bus

647

00:34:15,250 --> 00:34:13,129

too much back in time and mixing di

648

00:34:17,470 --> 00:34:15,260

felline just because we're similarity

649

00:34:20,079 --> 00:34:17,480

perhaps twenty two worlds enti presente i

650

00:34:23,710 --> 00:34:20,089

don't feel confident that were mi sul

651
00:34:25,960 --> 00:34:23,720
bigoni hyperfair a tool to stop elite e

652
00:34:29,440 --> 00:34:25,970
lerner e con strenui physiology il rider

653
00:34:31,779 --> 00:34:29,450
dei bulls hold'em high agreed to agri

654
00:34:34,210 --> 00:34:31,789
however the widow nanni to push disform

655
00:34:36,549 --> 00:34:34,220
il film one to one to move and try to

656
00:34:38,260 --> 00:34:36,559
address we are from revolutionary it is up to the

657
00:34:45,000 --> 00:34:38,270
refuge they are decided really wigan i

658
00:34:58,200 --> 00:34:47,859
happy few whiteboard software reduction

659
00:35:03,670 --> 00:34:58,210
story the arab banking express donato

660
00:35:05,890 --> 00:35:03,680
genoa analysis 6 20 go ahead jeans final

661
00:35:08,650 --> 00:35:05,900
organism cui bimbo of in sol for the a

662
00:35:11,019 --> 00:35:08,660
chi nego i cali da expansion

663
00:35:12,579 --> 00:35:11,029

experimenta andes of reducing conditions

664

00:35:14,349 --> 00:35:12,589

and poor's a network of sincan of

665

00:35:16,779 --> 00:35:14,359

more chance but the dogs of the

666

00:35:19,029 --> 00:35:16,789

puzzle express pattern of the pop spirit

667

00:35:22,180 --> 00:35:19,039

independent box of the dates swan his soul

668

00:35:27,970 --> 00:35:22,190

funk queen street artist and therefore ex iri

669

00:35:30,970 --> 00:35:27,980

of the case by undisputed sent

670

00:35:32,930 --> 00:35:30,980

one isaia software you may as well suffer from

671

00:35:36,930 --> 00:35:32,940

you

672

00:35:41,400 --> 00:35:36,940

however over expression blend of leasing

673

00:35:45,599 --> 00:35:41,410

born to bring up and match problem a

674

00:35:49,200 --> 00:35:45,609

robot de pierre facing in star in enzyme

675

00:35:52,079 --> 00:35:49,210

rich activities indies anaerobic firm does

676

00:35:54,410 --> 00:35:52,089

the center and it is here that north knock out

677

00:35:56,730 --> 00:35:54,420

jeans weekend o genetically modified

678

00:35:58,500 --> 00:35:56,740

without guidance eric another su bing di

679

00:36:01,920 --> 00:35:58,510

scarti in the possibility of developing

680

00:36:08,789 --> 00:36:01,930

systems bye weekend in activate syfy

681

00:36:10,980 --> 00:36:08,799

jeans aptitude alternate red jeans out

682

00:36:14,190 --> 00:36:10,990

no che out easing per di nis function

683

00:36:21,890 --> 00:36:14,200

and howie b e major a step forward to

684

00:36:29,670 --> 00:36:26,099

media center of fantastic and one of the

685

00:36:32,460 --> 00:36:29,680

sunsets troll state introducing to one

686

00:36:34,339 --> 00:36:32,470

organis spy knocking audio i love logan

687

00:37:43,370 --> 00:36:34,349

footing in sesto regardless of fez

688

00:37:48,600 --> 00:37:46,230

good split and show whence 3 vote

689

00:37:51,540 --> 00:37:48,610

literno files verso sacred screen file and

690

00:37:53,760 --> 00:37:51,550

william limit number go slide show is

691

00:37:55,410 --> 00:37:53,770

like twenty something orso murray

692

00:37:57,210 --> 00:37:55,420

cantelli ut des stastistiche alle

693

00:37:59,130 --> 00:37:57,220

significant difference in di optimum

694

00:38:01,860 --> 00:37:59,140

temperatures between right questions

695

00:38:04,380 --> 00:38:01,870

right cui chef hajer tempers on the front

696

00:38:07,860 --> 00:38:04,390

one help one step i'm in a pierce

697

00:38:10,350 --> 00:38:07,870

del to start person of fables einstein

698

00:38:12,210 --> 00:38:10,360

so let's go i've never had on tv

699

00:38:15,330 --> 00:38:12,220

for action camera i.e. here at speeches

700

00:38:28,520 --> 00:38:15,340

are surgeries more times next role

701

00:38:34,980 --> 00:38:28,530

time in this moment there is bayern

702

00:38:50,870 --> 00:38:34,990

racing they drive out some now but it is today

703

00:39:14,480 --> 00:38:50,880

yes and bayern action or the heart will be the

704

00:39:34,959 --> 00:39:14,490

bayern north sting that in general

705

00:39:43,399 --> 00:39:39,919

great question writing aidan answer for

706

00:39:48,289 --> 00:39:43,409

that for this hard cannes della infinito

707

00:39:51,499 --> 00:39:48,299

think about in oman sail buy in un'aura

708

00:39:53,899 --> 00:39:51,509

sant'umile seric pointed out and just

709

00:39:57,139 --> 00:39:53,909

josie uidenti metaboli yes lotman

710

00:39:59,749 --> 00:39:57,149

google rom devotees wellspring families to

711

00:40:05,239 --> 00:39:59,759

which we are the work in the yusen nodes

712

00:40:08,989 --> 00:40:05,249

off or where we put line with euro

713

00:40:12,609 --> 00:40:08,999

metabolism sure we knit start think

714

00:40:14,929 --> 00:40:12,619

that perhaps di bot di lection haliti

715

00:40:17,839 --> 00:40:14,939

specific theory and science we see

716

00:40:20,709 --> 00:40:17,849

today was not the snow crystallized in

717

00:40:23,539 --> 00:40:20,719

the same way and war history

718

00:40:26,149 --> 00:40:23,549

win the Turks for the outdoors open for

719

00:40:28,639 --> 00:40:26,159

exploration and what we believe di

720

00:40:32,349 --> 00:40:28,649

almetabolo ma da olbia great train in

721

00:40:37,120 --> 00:40:32,359

which starting where to move di horizon

722

00:40:37,130 --> 00:41:06,819

in madrid the programs experiment in

723

00:41:06,829 --> 00:41:45,950

action aid nations rugby

724

00:42:29,250 --> 00:42:24,930

il padre il formadio call computer ai

725

00:42:32,900 --> 00:42:29,260

dehor answer to the interest income di

726

00:42:37,890 --> 00:42:32,910

only thing i've seen the biology

727

00:42:39,840 --> 00:42:37,900

expressions ex people the use the

728

00:42:42,600 --> 00:42:39,850

biology we have a lot of labor day we

729

00:42:46,710 --> 00:42:42,610

used to throw boundaries between things

730

00:42:51,150 --> 00:42:46,720

and one of those who was making forma

731

00:42:54,050 --> 00:42:51,160

iqaluit pander between the role of the

732

00:42:57,150 --> 00:42:54,060

strip tease reaction ghosts this way in

733

00:43:04,460 --> 00:42:57,160

disorganic disorganic disease in auto

734

00:43:56,250 --> 00:43:04,470

too fast slender wenders tartufo the

735

00:44:02,810 --> 00:44:00,010

and returned to remaining another May 23rd