



1
00:00:00,080 --> 00:00:04,150
might be able to capture dark matter

2
00:00:07,510 --> 00:00:05,110
um

3
00:00:10,150 --> 00:00:07,520
okay i love these multi-part questions

4
00:00:14,310 --> 00:00:12,549
i am not trying to make a case that the

5
00:00:17,750 --> 00:00:14,320
tunguska blast was an anti-matter

6
00:00:19,590 --> 00:00:17,760
explosion i simply wished to point to it

7
00:00:21,029 --> 00:00:19,600
as an example of the type of event we're

8
00:00:23,429 --> 00:00:21,039
looking at

9
00:00:25,750 --> 00:00:23,439
in terms of neutrino detection

10
00:00:27,910 --> 00:00:25,760
that is constrained by

11
00:00:31,349 --> 00:00:27,920
particle interaction cross sections

12
00:00:33,510 --> 00:00:31,359
which at the moment we have no idea how

13
00:00:36,069 --> 00:00:33,520

to manipulate and there may in fact be

14

00:00:39,030 --> 00:00:36,079

no way even in principle to manipulate

15

00:00:46,709 --> 00:00:39,830

i

16

00:00:49,670 --> 00:00:46,719

oh uh dark matter

17

00:00:51,830 --> 00:00:49,680

we don't know what dark matter is but

18

00:00:54,229 --> 00:00:51,840

whatever it is it presumably shares the

19

00:00:55,750 --> 00:00:54,239

properties of neutrinos in having very

20

00:00:57,590 --> 00:00:55,760

low interaction

21

00:01:00,310 --> 00:00:57,600

cross-sections

22

00:01:01,910 --> 00:01:00,320

therefore being able to

23

00:01:04,710 --> 00:01:01,920

tap it for energy looks like an

24

00:01:06,390 --> 00:01:04,720

exceedingly remote prospect at this time

25

00:01:08,230 --> 00:01:06,400

i always bend the rules a little bit

26

00:01:15,350 --> 00:01:08,240

when younger people want to participate

27

00:01:21,109 --> 00:01:18,149

uh i was wondering how you would capture

28

00:01:24,469 --> 00:01:21,119

those particles to reuse them

29

00:01:27,590 --> 00:01:24,479

to get energy to

30

00:01:30,390 --> 00:01:27,600

use the other particles for more energy

31

00:01:33,109 --> 00:01:30,400

does that make sense

32

00:01:35,350 --> 00:01:33,119

uh okay how how do we

33

00:01:39,830 --> 00:01:35,360

how do we actually do the capture and

34

00:01:42,870 --> 00:01:39,840

reprocessing that i refer to so glibly

35

00:01:45,429 --> 00:01:42,880

the the answer is that this is where i

36

00:01:48,230 --> 00:01:45,439

wave my hands uh with the phrase of

37

00:01:50,469 --> 00:01:48,240

sufficiently advanced technology we know

38

00:01:51,590 --> 00:01:50,479

that it's physically possible in

39

00:01:53,190 --> 00:01:51,600

principle

40

00:01:54,789 --> 00:01:53,200

we don't know how to actually build the