



1
00:00:03,919 --> 00:00:02,389
my name is Lauren poyo and I'm an

2
00:00:06,590 --> 00:00:03,929
astronomer at the Space Telescope

3
00:00:08,839 --> 00:00:06,600
Science Institute I did my undergraduate

4
00:00:11,570 --> 00:00:08,849
economic barrier in cash or in France

5
00:00:15,010 --> 00:00:11,580
and then i went for Princeton for

6
00:00:18,769 --> 00:00:15,020
graduate school I do research on

7
00:00:21,830 --> 00:00:18,779
exoplanets taking a picture of planets

8
00:00:23,090 --> 00:00:21,840
next to a nearby star you have a star

9
00:00:25,880 --> 00:00:23,100
that's 10 billion times brighter than

10
00:00:27,500 --> 00:00:25,890
the planet both the light of the star in

11
00:00:29,179 --> 00:00:27,510
the plant get into your telescope what

12
00:00:30,980 --> 00:00:29,189
you need to use is an optical device

13
00:00:33,650 --> 00:00:30,990

that's called the corner breath it's

14

00:00:36,260 --> 00:00:33,660

just a filter but it's very clever

15

00:00:38,840 --> 00:00:36,270

filled that's able to make the

16

00:00:41,930 --> 00:00:38,850

difference between starlight and planet

17

00:00:44,720 --> 00:00:41,940

like in terms of coronal graph design

18

00:00:48,500 --> 00:00:44,730

themselves I would say two or three

19

00:00:52,250 --> 00:00:48,510

years ago all we really do well is when

20

00:00:55,279 --> 00:00:52,260

the telescope looks like a big circle we

21

00:00:56,479 --> 00:00:55,289

had no idea how to design them for phila

22

00:00:58,400 --> 00:00:56,489

scopes are a little more complicated

23

00:01:01,639 --> 00:00:58,410

like the James Webb with all these exams

24

00:01:03,709 --> 00:01:01,649

and stuff and I've put out a few ideas

25

00:01:06,109 --> 00:01:03,719

on how to do it it turns out you don't

26
00:01:09,109 --> 00:01:06,119
need a circle you can have any telescope

27
00:01:11,090 --> 00:01:09,119
design we think that it's going to

28
00:01:13,460 --> 00:01:11,100
enable us to launch much bigger

29
00:01:15,380 --> 00:01:13,470
apertures in space so by aperture we

30
00:01:17,560 --> 00:01:15,390
mean like the size of the of the big

31
00:01:19,570 --> 00:01:17,570
mirror

32
00:01:22,149 --> 00:01:19,580
I think it's great long got this award

33
00:01:23,590 --> 00:01:22,159
he's a very bright young scientist and

34
00:01:26,260 --> 00:01:23,600
he's working on an extremely difficult

35
00:01:28,750 --> 00:01:26,270
task and the work he's done will help

36
00:01:30,790 --> 00:01:28,760
pave the way to build future space

37
00:01:33,460 --> 00:01:30,800
telescopes to observe planets that look

38
00:01:37,660 --> 00:01:33,470

like the news I was so excited here that

39

00:01:39,910 --> 00:01:37,670

Laurent won this prize Moreau is so

40

00:01:42,580 --> 00:01:39,920

energetic and enthusiastic about his

41

00:01:45,430 --> 00:01:42,590

work and he's already made contributions

42

00:01:49,359 --> 00:01:45,440

to discovery and characterization of

43

00:01:52,450 --> 00:01:49,369

giant planets around young stars I like

44

00:01:56,770 --> 00:01:52,460

to build stuff I was illegal kind of kid

45

00:01:58,120 --> 00:01:56,780

I kind of some point realize that I want

46

00:02:01,150 --> 00:01:58,130

to build something that that I was like

47

00:02:03,760 --> 00:02:01,160

some greater purpose not sweater

48

00:02:06,100 --> 00:02:03,770

purposes of course to detect the planet

49

00:02:07,330 --> 00:02:06,110

that looks like birth it's one of the