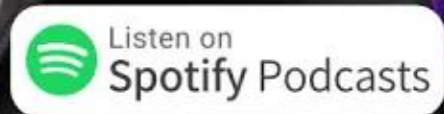




CLIPS

# SIMÉON HEIN

## DARK MATTER MONSTERS



1  
00:00:04,470 --> 00:00:02,629  
we're taught in biology classes and

2  
00:00:07,349 --> 00:00:04,480  
science classes that there's this tree

3  
00:00:09,669 --> 00:00:07,359  
of life and somehow we're at the apex of

4  
00:00:12,150 --> 00:00:09,679  
it right and it starts with sea life and

5  
00:00:14,310 --> 00:00:12,160  
it kind of singular cell organisms and

6  
00:00:15,430 --> 00:00:14,320  
ends up with us and that's it

7  
00:00:17,590 --> 00:00:15,440  
i bet

8  
00:00:19,510 --> 00:00:17,600  
what we recognize in life right now is a

9  
00:00:21,830 --> 00:00:19,520  
tenth of a percent of the life that's

10  
00:00:24,790 --> 00:00:21,840  
around us even in our own galaxy i mean

11  
00:00:27,109 --> 00:00:24,800  
we know just from dark matter alone

12  
00:00:28,790 --> 00:00:27,119  
the study of dark matter and this we

13  
00:00:30,470 --> 00:00:28,800

haven't talked about this yet andy in

14

00:00:32,389 --> 00:00:30,480

our conversation so far

15

00:00:34,229 --> 00:00:32,399

is that 99.5

16

00:00:37,350 --> 00:00:34,239

of the matter and energy out there is

17

00:00:39,110 --> 00:00:37,360

invisible to our sensory systems and all

18

00:00:41,350 --> 00:00:39,120

of our equipment it can only be detected

19

00:00:43,910 --> 00:00:41,360

gravitationally even the other type of

20

00:00:46,150 --> 00:00:43,920

matter that's similar to us is

21

00:00:47,670 --> 00:00:46,160

considered non-baryonic

22

00:00:48,950 --> 00:00:47,680

which means it doesn't interact with

23

00:00:52,150 --> 00:00:48,960

light

24

00:00:54,549 --> 00:00:52,160

so even in our own universe we know that

25

00:00:56,389 --> 00:00:54,559

we're only seeing like a half a percent

26

00:00:58,709 --> 00:00:56,399

so even if we look at the james webb

27

00:00:59,910 --> 00:00:58,719

telescope images which are beautiful the

28

00:01:02,069 --> 00:00:59,920

new ones that are coming back like that

29

00:01:04,549 --> 00:01:02,079

pinwheel galaxy yeah

30

00:01:05,670 --> 00:01:04,559

just like wow if that doesn't make your

31

00:01:06,870 --> 00:01:05,680

day i'm just

32

00:01:08,789 --> 00:01:06,880

beautiful

33

00:01:10,870 --> 00:01:08,799

well that's only a half percent folks of

34

00:01:13,270 --> 00:01:10,880

everything that's out there so is it

35

00:01:15,350 --> 00:01:13,280

really that far-fetched to think that

36

00:01:17,109 --> 00:01:15,360

maybe we're only aware of half a percent

37

00:01:19,749 --> 00:01:17,119

of the types of life