Incoming freshman Solana Lilly's path to UC Irvine started long ago

Lilly discovered a podcast that changed everything. Tuesday, October 01, 2024 Lucas Van Wyk Joel UCI Physical Sciences Communications



UC Irvine Department of Physics & Astronomy's Professor Daniel Whiteson and incoming freshman Solana Lilly in the foyer of Frederick Reines Hall.

Picture Credit: Steve Zylius / UC Irvine

When she was 12, Solana Lilly discovered podcasts, and shortly after that she discovered the universe.

Lilly just enrolled as a freshman at UC Irvine as a physics major in the Department of Physics & Astronomy, but her path to campus began when her parents let her start listening to podcasts when she was 12.

"For a long time, all I had was a little iPod for listening to music," said Lilly. "And as soon as I got a phone, I was immediately interested in what else I could listen to aside from just the four or so albums I had downloaded, and I became interested in all the kinds of podcasts."

One of the first podcasts she listened to was "Daniel and Jorge Explain the Universe." It's a podcast hosted by Professor Daniel Whiteson of the UC Irvine Department of Physics & Astronomy and engineer and creator of the well-known webcomic Ph.D. Comics, Jorge Cham. The podcast tackles different questions about the nature of the cosmos in a way that makes even the most esoteric concepts relatable.

"Daniel and Jorge Explain the Universe' was my bread and butter for so long," said Lilly. "They explain things in a way that made even a little sixth grader like me understand particle physics."

Lilly became one of the podcast's biggest fans, so much so that, one morning on a drive to school, her mom suggested she reach out to Whiteson to ask him more about physics.

Lilly wrote the following:

"Hi, my name is Solana Lilly and I am 12 years old. I have been listening to your podcast for a little over a year and it is incredible. I love that you answer (or try to answer) all the questions about the universe and would like to say thanks for getting me interested in particle and astro physics..."

Lilly didn't think she would get a reply, but she sent the email to Whiteson anyway. A short while later, Whiteson's name appeared in Lilly's inbox:

"Hello Solana, Thank you so much for writing in! I'm so glad to hear that you are enjoying the podcast. Getting people interested in particle and astrophysics is EXACTLY why I'm doing it..."

It was the sort of reply, Lilly explained, that helped her go from understanding particle physics as a 12-year-old to believing that studying science was something she could one day do. "I've been loosely interested in science for as long as I can remember," said Lilly. "We went to a museum when I was eight, and they had all this weather stuff, and what really interested me was all the science behind the weather. I'm not super interested in the weather anymore, but explaining how rain starts and all that stuff – it was things that had never been explained before, and I was finding the why behind why everything happens really interested me right from the beginning."

Whiteson's reply helped galvanize Lilly's quest for answers to all the why's that abound in the universe, and in the years that followed Lilly dove into all kinds of scientific pursuits. She went stargazing with an eighth-grade science class in the countryside in Temecula, and she competed in the astronomy competition in her local Science Olympiad.

"There's so much complexity on our planet and looking out into the whole universe and knowing there could be planets with the same amount or more complexity, and just knowing that there's so much that we don't know yet, it's crazy," said Lilly.

When it came time to apply to college, Lilly decided to come to UC Irvine, and that's when she remembered: Whiteson's a professor here. Lilly wrote him another email: "You probably don't remember me, but I have been listening to your podcast 'Daniel and Jorge Explain the Universe' since I was in seventh grade. I wanted to write to let you know that I will be attending UCI Campuswide Honors Collegium next year as a freshman and majoring in Applied Physics! Your podcast really formed my path through STEM and inspired me to pursue a physics major. I can't wait to meet you in person and hopefully have a chance to work on research/take a class with you."

Just last week during move-in week, Whiteson and Lilly met in person for the first time in front of Reines Hall at UC Irvine Physical Sciences.

"I was glad to find that Whiteson had the same good-natured personality in person as he does on his podcast," said Lilly. "It was like talking to an old friend. It really made this huge campus feel a bit more like home."

"It's wonderful to connect with the next generation of bright and curious minds like Solana," said Whiteson. "They are the ones who are going to figure it all out."

<u>Feature Stories</u> <u>Physics & Astronomy</u> <u>The Future of Fundamental Science</u> <u>Instruction</u> View PDF