Citizen Science with the IceCube Neutrino Observatory

ABSTRACT: *Name that Neutrino* is a citizen science project where volunteers aid in classification of events for the IceCube Neutrino Observatory, an immense particle detector at the geographic South Pole. Volunteers complete classifications of videos produced from simulated data of both neutrino signal and background interactions. *Name that Neutrino* has obtained more than 250,000 classifications by over 3,500 registered volunteers that are then compared to results obtained by a deep neural network machine-learning algorithm. Preliminary results and next steps for *Name that Neutrino* will be discussed.

Wednesday, February 19th 2:00-3:15 p.m. Science Hall 126 & <u>Zoom</u>

For more information, visit our website: <u>go.rowan.edu/sciencehallseminars</u>

Professor Love earned her PhD searching for dark matter with the DarkSide Collaboration. She completed her postdoctoral work at the Transportation Security Laboratory, working on explosives detection with X-ray scanners. In addition, Love has performed research at NASA's Goddard Space Flight Center, Fermi National Accelerator Laboratory and Gran Sasso National Laboratory in Italy. She serves as the director and founder of Start Talking Science, a free annual event where STEM scholars present posters detailing their research to a general audience.

Professor Love has taught over 20 distinct courses to almost every type of major, including physics, business, fashion design, engineering and biology – to name a few. Her courses range from 100-level introductory conceptual courses to 400-level year-long senior research courses. She is the recipient of the Drexel University Evidence-Based Teaching Award in Undergraduate STEM Education and the Drexel Graduate Student Association's Award for Outstanding Faculty Mentor.

The magazine Diverse: Issues in Higher Education named Professor Love, along with 14 other honorees, in its Emerging Scholars of the Year issue published on January 9, 2025. This annual edition profiles top scholars throughout the country who are making their mark in the academy through teaching, research, and service.

Christina Love, Ph.D.

Drexel University Associate Teaching Professor, Department of Physics

go.rowan.edu/sciencehallseminars

SCIENCE HALL SEMINARS SPONSOR: Dept. of Physics & Astronomy

