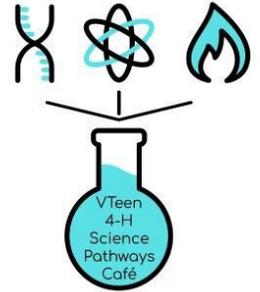




VTeen 4-H Science Pathways Cafes



Radio Frequency Engineering and How it Relates to Climate Change

Tuesday, November 30, 2021, 7:00-8:00 pm

Open to all youth entering grades 7-12 in VT and across the country!

Register by 11/30 @ 12 noon to receive the Zoom link

@ www.uvm.edu/extension/youth/announcements



What do cellphones, satellites, and WiFi have in common? They are utilizing forms of radio frequency engineering. Although car radios utilize the radio frequency (RF) spectrum, there are many more uses for RF engineering than radios. RF engineering can be used for communication purposes such as cellphones, or WiFi but they can also be used for sensing applications to gather important information. One way RF engineering is being used are devices called radiometers. Radiometers are used in many applications including monitoring the conditions of Earth from satellites. These radiometers can provide critical information about the moisture of

soil and the temperature of the oceans, which provide information about how the world's climate is changing. Tune into this virtual Teen Science Café to learn more about how these radiometers work and what they can tell us about climate change.

ABOUT OUR SPEAKER

Jena Staab is a graduate student at the University of Vermont (UVM) in the field of electrical engineering with a focus on wireless communications. She graduated from UVM with her bachelor's degree in electrical engineering in 2021. Before going to UVM she grew up in Southern Vermont. Her current work is being done with the assistance of the Vermont Space Grant Consortium and focuses on utilizing software define radios for radiometry.

What is a Virtual Teen Science Café? It is a free, fun way for teens to explore science, engineering and technology with local scientists, engineers and technology experts. Teens will "meet a scientist", learn about their work, and be able to participate in informal discussions.

Questions? Contact lauren.traister@uvm.edu

To request a disability-related accommodation to participate in this program, please contact the 4-H Office at 802-888-4972 or lauren.traister@uvm.edu by November 9, 2021 so we may assist you.



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