

Stories from the classroom

QuarkNet has opened up a vast area of physics to my students and myself. If not for QuarkNet, I would not be nearly as likely to teach about modern physics and certainly not with the knowledge base I have gained through lectures and field trips. I have been on three trips with the K-State QuarkNet group to Oak Ridge National Laboratory in Oak Ridge, Tennessee, to Sanford Underground Research Facility in Lead, South Dakota, and to LIGO in Louisiana. With each trip, I get to learn so much about the opportunities available to students who would enter the field and just to let them know of research that is out there. From LIGO, especially, I brought home a slew of materials and resources for activities to teach physics concepts. I also was privileged to participate in a week long Data Camp at Fermilab in Batavia, Illinois, during which I worked with other high school teachers from around the country and Fellows with the QuarkNet group to gain more understanding of the world of high energy physics and gaining classroom activities for my students. I have a cosmic ray muon detector on loan from Fermilab through the K-State group to collect data for students around the world to use in research.

This will be the sixth year that I have brought students to participate in the QuarkNet Masterclass day put on by our K-State QuarkNet group in conjunction with Fermilab and other locations around the world. This is my seventh year with K-State QuarkNet.

The biggest accomplishment for my students has been the authentic research they have performed with data collected from cosmic ray muon detectors. The chance to investigate something real, as my students put it, in particle physics is very exciting. So much so, that it has inspired many of my students to choose STEM careers, some specifically in physics.

Renee Teague Cheney High School Cheney, KS Kansas State University Center