Virginia QuarkNet Center 2021-2022 Activity Report

December 27, 2022

The Virginia QuarkNet Center currently has around 10 active high school teachers from Richmond and northern Virginia. Josh Erlich from William & Mary and Phil Rubin from George Mason University are the mentors. Several teachers share leadership roles, with Deborah Roudebush and Mike Fetsko sharing the bulk of the organizational responsibilities this past year.

Masterclass 2022

William & Mary hosted a CMS Masterclass on March 19, 2022 for around 20 students from VA and MD. This was our first live masterclass since the start of the COVID pandemic. In addition to the analysis of CMS data and videoconference with Fermilab, students toured a cold atom lab, a JLab polarized He3 target lab, and a remote NOvA control room hosted by Tricia Vahle, a spokesperson for the NOvA experiment.

<u>Workshops</u>

The Virginia Center hosted two virtual workshops: a half-day Autumn workshop on November 20, 2021; and a three-day Summer workshop on August 1-3, 2022.

The Autumn workshop featured a talk by Phil Rubin and an intro to the World Wide Data Day workshop by Ken Cecire.

The Summer workshop featured a discussion of how to describe QuarkNet with Ken Cecire, a talk by Josh Erlich, discussions of post-pandemic teaching experiences and physics career opportunities, a Neutrino & NOvA masterclass and coding experience, and a Higgs @ 10 coding workshop including a visit by Marc Sher.

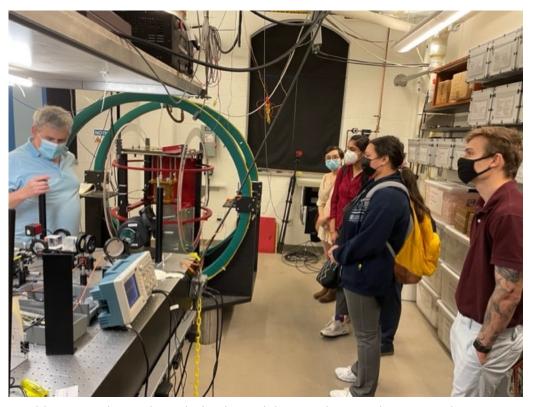
Other Activities

Five students from Godwin High School participated in World Wide Data Day, November 10, 2022.

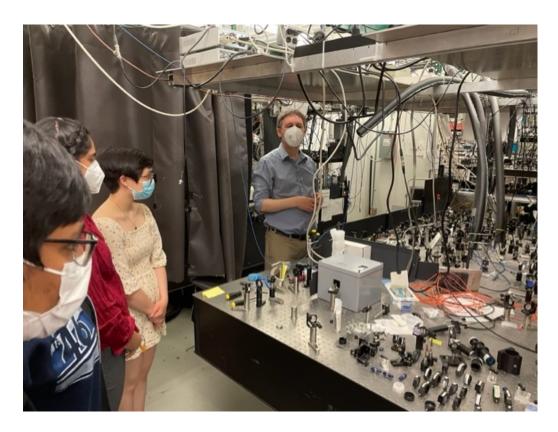
A group of Godwin High School Students participated in a masterclass analyzing J/Psi data and sharing results with students from Thomas More School in Vancouver, Canada and Medford High School in Medford, MA. Morgan Logsdon, a graduate of Godwin HS and William & Mary, moderated the discussion and presented what life as a college physics major was all about to the students.



Tricia Vahle shows the NOvA control room to students at the Masterclass.



Todd Averett shows the polarized He3 lab to students at the Masterclass.



Seth Aubin shows the cold atom lab to students at the Masterclass.



Masterclass videoconference.