



Chesapeake Section of the
 American Association of Physics Teachers
 Spring 2022 Semi-Virtual Meeting
 April 2, 2022 @ **RADFORD** UNIVERSITY

— Morning Program —

8:00AM – 8:20AM	On-site Registration
8:20AM – 8:30AM	Welcome from CSAAPT President Jason Sterlace
Morning Session 1	Chair : Jason Sterlace (James Madison University, VA)
8:30AM – 8:45AM	James Freericks (Georgetown University, DC) <i>The science fiction of quantum measurement instruction</i>
8:45AM – 9:00AM Zoom talk	Phuc Tran (John Tyler Community College, VA) <i>Solving the Time Dependent Schrödinger Equation with Excel</i>
9:00AM – 9:15AM Zoom talk	Gregory MacDougall (Virginia Department of Education) <i>New State Guidelines for Advanced Physics</i>
9:15AM – 9:30AM Zoom talk	Kimberly Jacoby Morris (Air Force Office of Scientific Research, MD) <i>How to Work with the Air Force Office of Scientific Research</i>
9:30AM – 9:45AM	Break & Discussion
Morning Session 2	Chair : Joy Scales (Blacksburg High School, VA)
9:45AM – 10:00AM	Lewis McIntyre (MD) <i>Relativistic Doppler Shift and the Measurement of ct, x</i>
10:00AM – 10:15AM Zoom talk	Royce Zia (Virginia Tech) <i>Optimal shot-put release angle revisited : solving a maximization problem without calculus</i>
10:15AM – 10:30AM	Carl Mungan (U.S. Naval Academy, MD) <i>Pulling a Spool</i>
10:30AM – 10:45AM Zoom talk	Kent Yagi (University of Virginia) <i>Gravitational Wave Astronomy: Current and Future</i>
10:45AM – 11:00AM	Break & Discussion
Featured Talks	Chair : Brett Taylor (Radford University, VA)
11:00AM – 11:30AM	Alma Robinson (Virginia Tech) <i>STEP UP - Inspiring Women to Pursue Physics</i>
11:30AM – 12:00PM Zoom talk	Alexis Knaub (SEA Change) <i>Changing the culture in Physics & Astronomy Departments – the SEA Change Project</i>

— Afternoon Program —

12:00PM – 1:00PM	Lunch Break
1:00PM – 2:00PM	DEI Workshop lead by Radford Faculty
2:00PM – 2:15PM	Break & Discussions
Afternoon Session 1	Chair : Mukesh Chhajer (Danville Community College, VA)
2:15PM – 2:30PM	Muge Karagoz (University of Maryland, College Park) <i>Examples of DEI Activities in a Research Course</i>
2:30PM – 2:45PM Zoom talk	Qi Lu (Delaware State University) <i>Best Practices for Effective Support of Student Learning in Algebra-Based Physics Courses</i>
2:45PM – 3:00PM	Rebecca Jaronski (Christiansburg HS/Virginia Tech QuarkNet Center) <i>QuarkNet: Particle Physics....in High School!</i>
3:00PM – 3:15PM Zoom talk	Edwin Barnes (Virginia Tech) <i>Teaching quantum information science to high-school and early undergraduate students</i>
3:15PM – 3:30PM	Mike Florek (Roanoke County Public Schools, VA) <i>Impulse and Concussions</i>
3:30PM – 3:45PM	Break & Discussion
Afternoon Session 2	Chair : Ryan Brem (Radford High School, VA)
3:45PM – 4:00PM Zoom talk	Deva O'Neil (Bridgewater College, VA) <i>Doing 3D Printing with Students in Physics Labs</i>
4:00PM – 4:15PM Zoom talk	Hannah McPherson (Bridgewater College, VA) <i>Using 3D Printing within my Physics Education through Free Computer-Aided Design Resources</i>
4:15PM – 4:30PM	Alma Robinson (Virginia Tech) <i>Predict, Play, & Process</i>
4:30PM – 4:45PM	Sasha Campana (Randolph-Macon College, VA) <i>Mini-Wilson Cloud Chambers</i>
4:45PM – 5:00PM	David Wright (Tidewater Community College, VA) <i>Using a hand held DC Generator for a Hands-on Electrical Learning experience</i>
5:00PM – 5:10PM	Closing remarks and announcements from CSAAPT President Jason Sterlace
5:10PM – 6:00PM	CSAAPT Business Meeting
6:05PM – 7:00PM	Special Planetarium Show for in-person attendees