2021 AAPT Virtual Winter Meeting

at a Glance

All times are EST

Saturday, Jan. 9, 2021

10–10:30 **AAPT WELCOME** and Land Acknowlegement

10:30–11:30 **Plenary**, Geraldine Cox, Gemant Award Winner

11:30–12 noon **Exhibit Hall Break**

11:30–12:30 SEAchange Discussion **(DEI Resource Room)**

12–1:15

- A1.1 21st Century Physics in the Classroom
- A1.2 Effective Practices in Educational Technology
- A1.3 My Favorite Vernier Product
- A1.4 PER: Assessment, Grading and Feedback
- A1.5 Things We Will Keep from Remote Experiences in Teaching Physics Labs/ Courses
- A1.6 Upper Division Undergraduate
- A1.7 Quantum Physics in Introductory Courses
- A1.8 Support for Unprotected Faculty and Teachers
- A1.9 Technology Playground
- A1.10 Using Big Data and Machine Learning Understand Physics Outcomes
- A1.11 Chemical vs Nuclear Reactions (K-12 Resource Room)

1:15–1:30 Break

1:30–2:45

- A2.1 PER: Curriculum and Instruction
- A2.2 Quantum Information / Quantum Computing in the Classroom
- A2.3 Undergraduate Physics Education in China
- A2.4 Using and Contributing to the Living Physics Portal
- A2.5 Astrobiology & Exoplanets
- A2.6 Lecture/Classroom
- A2.7 Physics and Experimental Research on Black Holes
- A2.8 Supporting K-12 Physics Educators
- A2.9 PTRA Presents Perimeter: Evidence for Climate Change
- A2.10 What to Say When Your Students Ask About Condensed Matter
- A2.1-01PA Career Paths for PER students (undergrad to grad & after) (PANEL, Zoom)

2:45–3 Break

3–4 SPS Undergraduate Oral Talks (PANEL, Main Stage)

4–5 Section Representatives/Alternates Meeting (Zoom)

Sunday, Jan. 10, 2021

10:30–11:30 **Exhibit Hall Break**

10:30–11:30 K-12 Teachers' Meet-up

10:30–11:30 Early Career Meet-up

10:30–11:30 Two-Year College Meet-up

11:30–12:30 **Plenary,** Dr. Adriaan Bax, NIH Distinguished Investigator National Institutes of Health

12:30–1 **Exhibit Hall Break**

12:30–1:30 Vernier Software and Technology Commercial Workshop

12:30–1:30 What would you like to see from AAPT in terms of Equality, Diversity?

1–2:15

- B1.1 21st Century Physics in the Classroom II
- B1.2 Doing Laboratory Activities in an Online Learning Environment
- B1.3 Effective Practices in Educational Technology II
- B1.4 Get the Facts Out!
- B1.5 PER: Diverse Investigations
- B1.6 Physics on the Road and Art of Demonstrations (Waxing or Waning?)
- B1.7 Student Topical Discussion & Social (PANEL, Zoom)
- B1.8 Teaching Science in a Culture of Mistrust
- B1.9 Making Physics Labs More Accessible: Perspectives of Current Physics Students I
- B1.10 Flip Your Classroom: How to Use Flipped Learning in Both a Remote and Traditional Classroom (K-12 Resource Room)

2:15–2:30 Break

2:30–3:45

- B2.1 Astronomy Education Research I
- B2.2 Built-In Assessments
- B2.3 Champions and Change: Curriculum, Community and Campuses I
- B2.4 High School
- B2.5 PER: Diversity, Equity & Inclusion
- B2.6 Physics Education from Around the World
- B2.7 Physics Programs at HSIs/MSIs
- B2.8-01PA Introduction to Zooniverse Citizen Science in Your Classroom (PANEL, Zoom)

3:45–4 Break

4–5 AAPT Meeting of the Members

7–8 K-12 Happy Hour

Monday, Jan. 11, 2021

10:30–11:45

- C1.1 Teaching the Introductory Physics for the Life Sciences (IPLS) Course
- C1.2 Astronomy (Posters)
- C1.3 Labs/Apparatus (Posters)
- C1.4 Physics Education Research I (Posters)
- C1.5 Lecture/Classroom (Posters)
- C1.6 Physics Education Research II (Posters)
- C1.7 Paradigms in Physics Potpourri
- C1.8 Teacher Training/Enhancement (Posters)
- C1.9 Changing Graduate Admissions: A Topical Discussion

11:45–12 Break

12–1 **Plenary,** McKenzie Mack Group (MMG)

1–1:30 **Exhibit Hall Break**

1–2 Discussion and Thoughts; McKensie Mack Plenary Follow Up

1–2 Vernier Software and Technology Commercial Workshop

1:30–2:45

- C2.1 Applying Network Analysis to Physics Education
- C2.2 B-sides and Bloopers from Famous Physicists PLUS Cartoon Physics
- C2.3 Champions and Change: Curriculum, Community and Campuses II
- C2.4 Effective Practices in Educational Technology III
- C2.5 Highlights of Astronotes
- C2.6 PER: Student and Instructor Support & Professional Development, Program and Institutional Change
- C2.7 Physics Education: International Perspectives
- C2.8 Promoting Retention and Making Physics More Accessible
- C2.9 Recent Developments and Perspectives in Research on Student Reasoning
- C2.10 Climate Change Solutions: There is HOPE!

2:45–3:45 Disability Meet-up

2:45–3:45 Meet-up for Members and Supporters of LGBTQ Community

2:45–3:45 Retired Physicist's Meet-up

2:45–3:45 International Meet-up

2:45–3:45 AAPT Tweet-up (zoom)

2:45–3:45 American Institute of Physics Commercial Workshop

3:30–4:30 PERTG Town Hall

4–5 TEAM UP – What is it all about? – DEI

4:30–6 Game Night

7-8 K-12 Happy Hour

Tuesday, Jan. 12, 2021

10:30–11:30 **AAPT Awards Session,** Doc Brown Futures Award: Kenric Davies

11:30–12:30 Bringing Culturally Relevant Pedagogy into Physics Education – DEI

11:30–12:45

- D1.1 Best Practices in Educational Technology Including PICUP and other Cool Computational Stuff!
- D1.2 Building a STEM-Wide Culture of Change
- D1.3 Effective Practices in Educational Technology IV
- D1.4 Introductory Courses
- D1.6 PER: Student Content Understanding, Problem-Solving and Reasoning
- D1.6 POGIL and Teaching Methods from other Disciplines
- D1.8 "Ooh I want to try that!" Best New Labs We've Seen
- D1.9 Making Physics Labs More Accessible: Perspectives of Current Physics Students II
- D1-10 Applied Improvisation for Physics

11:30–12:45 Digitalis Education Commercial Workshop

12:45–1 **Break**

1–2 **Plenary**: Wendy Freedman John and Marion Sullivan University Professor in Astronomy and Astrophysics and the College, Department of Astronomy and Astrophysics University of Chicago

2–2:30 **Exhibit Hall Break**

2:30–3:30 **Presidential Transfer with DSC Awards and Fellows**

2:30–3:45 Professional Skills for Students