workshop for new physics and astronomy faculty

JUNE 25-28, 2018

HOLIDAY INN

COLLEGE PARK, MD

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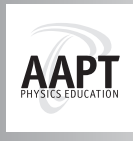

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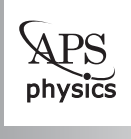

AMERICAN PHYSICAL SOCIETY

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Junjie Yang
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MONDAY, JUNE 25

11:00 A.M.–5:00 P.M.	WORKSHOP REGISTRATION	GRAND BALLROOM FOYER
	Holiday Inn – College Park, 10000 Baltimore Ave., Beltsville, MD 20740	
1:30–3:00 P.M.	WORKSHOP	GRAND BALLROOM AB
	Effective Grant Proposal Writing and Grant Opportunities with Research Corporation	
	Richard Weiner, Program Officer, Research Corporation for Science Advancement; rweiner@rescorp.org	
3:00–4:30 P.M.	WORKSHOP	GRAND BALLROOM AB
	Grant Opportunities at the National Science Foundation	
	Kathleen McCloud, Division of Physics, kmcloud@nsf.gov	
	Keith Dienes, Division of Physics, kdienes@nsf.gov	
	Joe Pesce, Division of Astronomical Sciences, jpesce@nsf.gov	
	Guebre Tessema, Division of Materials Research, gtessema@nsf.gov	
4:30–4:45 P.M.	BREAK	GRAND BALLROOM FOYER
4:45–5:15 P.M.	WELCOMING REMARKS	GRAND BALLROOM AB
	Welcome and Introductions	
	Robert Hilborn, Associate Executive Officer, AAPT, PI, Physics and Astronomy New Faculty Workshop	
	Beth Cunningham, Executive Officer, AAPT	
	Kate Kirby, Chief Executive Officer, APS	
	Kevin Marvel, Executive Officer, AAS	
	Michael Moloney, Chief Executive Officer, AIP	
5:15–6:30 P.M.	LARGE GROUP SESSION	GRAND BALLROOM AB
	Highlighting PER – The Journey from Traditional Instruction to Active Learning	
	Laurie McNeil, University of North Carolina – Chapel Hill	
6:30–7:30 P.M.	DINNER	GRAND BALLROOM CD
7:30–8:30 P.M.	LARGE GROUP SESSION	GRAND BALLROOM AB
	Change and Adoption: Scaffolding Your New Faculty Workshop Experience	
	Cassandra Horii, California Institute of Technology	

TUESDAY, JUNE 26

6:30–8:30 A.M.	BREAKFAST AND NETWORKING: HOLIDAY INN RESTAURANT– COLLEGE PARK	
8:30–8:40 A.M	INTRODUCTIONS AND FOLC ANNOUNCEMENT	GRAND BALLROOM AB
	Robert Hilborn, AAPT; Andy Rundquist, Hamline University; Darsa Donelan, Gustavus Adolphus College; and Mike Wood, University of St. Thomas	
8:40–9:55 A.M.	LARGE GROUP SESSION	GRAND BALLROOM AB
	Learner Centered Teaching in Physics and Astronomy	
	Ed Prather, University of Arizona	

TUESDAY, JUNE 26 (CONT.)

9:55–10:10 A.M.	BREAK	GRAND BALLROOM FOYER
10:10–11:10 A.M.	SMALL GROUP SESSIONS (PARTICIPANTS CHOOSE THREE OF THE FOUR SESSIONS)	
	1) Interactive Lecture Demonstrations	GRAND BALLROOM A
	2) Tutorials in Physics Lillian C. McDermott and Peter Shaffer, University of Washington	GRAND BALLROOM B
	3) Just-in-Time Teaching Andy Gavrin, Indiana University-Purdue University-Indianapolis	GRAND BALLROOM C
	4) PhET simulations Kathy Perkins, University of Colorado – Boulder	GRAND BALLROOM D
11:15 A.M.–12:15 P.M.	SMALL GROUP SESSIONS (PARTICIPANTS CHOOSE THREE OF THE FOUR SESSIONS) Repeat from 10:10–11:10 a.m.	
12:15–1:15 P.M.	GROUP PHOTO AND LUNCH	GRAND BALLROOM FOYER
1:15–2:15 P.M.	SMALL GROUP SESSIONS (PARTICIPANTS CHOOSE THREE OF THE FOUR SESSIONS) Repeat from 10:10–11:10 a.m.	
2:15–2:25 P.M.	BREAK	GRAND BALLROOM FOYER
2:25–3:45 P.M.	SMALL GROUP SESSIONS (PARTICIPANTS CHOOSE ONE OF THE FOUR SESSIONS)	
	1) Going deeper: PhET Kathy Perkins, University of Colorado – Boulder	GRAND BALLROOM A
	2) Going deeper: JITT Andy Gavrin, Indiana University-Purdue University-Indianapolis	GRAND BALLROOM B
	3) Going deeper: TPS (Peer Instruction) Ed Prather, University of Arizona	GRAND BALLROOM C
	4) Going deeper: Interactive Lecture Demos David Sokoloff, Univ. of Oregon and Ronald Thornton, Tufts Univ.	GRAND BALLROOM D
3:45–4:00 P.M.	BREAK	GRAND BALLROOM FOYER
4:00–5:00 P.M.	SMALL GROUP SESSIONS (PARTICIPANTS CHOOSE TWO OF THE THREE SESSIONS)	
	1) Labs Natasha Holmes, Cornell University	GRAND BALLROOM A
	2) Open Source Physics Mario Belloni, Davidson College	GRAND BALLROOM B
	3) Lecture Tutorials Ed Prather, University of Arizona	GRAND BALLROOM C
5:05–6:05 P.M.	SMALL GROUP SESSIONS (PARTICIPANTS CHOOSE TWO OF THE THREE SESSIONS) Repeat from 4:00–5:00 p.m.	
6:05–6:30 P.M.	BREAK	
6:30–7:30 P.M.	DINNER	GRAND BALLROOM CD
7:30–8:30 P.M.	GROUP MEETING **Faculty Online Learning Community group meeting** Andy Rundquist, Hamline University; Darsa Donelan, Gustavus Adolphus College; and Mike Wood, University of St. Thomas	GRAND BALLROOM AB

WEDNESDAY, JUNE 27

6:30–8:30 A.M.	BREAKFAST AND NETWORKING: HOLIDAY INN RESTAURANT – COLLEGE PARK
8:30–9:30 A.M.	LARGE GROUP SESSION — GRAND BALLROOM AB **Interactive Engagement in Upper-Level Courses and Problem Solving** Corinne Manogue, Oregon State University
9:30–9:45 A.M.	BREAK — GRAND BALLROOM FOYER
9:45–10:45 A.M	SMALL GROUP SESSIONS (PARTICIPANTS CHOOSE TWO) 1) Problem Solving in Upper Division — GRAND BALLROOM A Corrine Manogue, Oregon State University 2) Problem Solving in Introductory Physics — GRAND BALLROOM B Andy Rundquist, Hamline University 3) Problem Solving using the TPS Format — GRAND BALLROOM C Ed Prather, University of Arizona
10:50–11:50 A.M.	SMALL GROUP SESSIONS (PARTICIPANTS CHOOSE TWO) Repeat from 9:45–10:45 a.m.
11:50 A.M.–12:50 P.M.	LUNCH — GRAND BALLROOM FOYER
12:50–2:05 P.M.	LARGE GROUP SESSION — GRAND BALLROOM AB **Targeted Instructional Change** Alice Olmstead, Western Michigan University and Natasha Holmes, Cornell University
2:05–2:20 P.M.	BREAK — GRAND BALLROOM FOYER
2:20–3:20 P.M.	LARGE GROUP SESSION — GRAND BALLROOM AB **PhysPort/ComPADRE, Resources and Assessment** Bruce Mason, University of Oklahoma
3:20–3:35 P.M.	BREAK — GRAND BALLROOM FOYER
3:35–4:50 P.M.	LARGE GROUP SESSION — GRAND BALLROOM AB **Your Job as an Instructor and Guide of Marginalized Students** Jorge Moreno, Pomona College and Nicole E. Cabrera Salazar, Movement Consulting
4:50–5:05 P.M.	BREAK — GRAND BALLROOM FOYER
5:05–6:05 P.M	LARGE GROUP SESSION — GRAND BALLROOM AB **Departmental Ecosystems** Ted Hodapp, APS and Andy Rundquist, Hamline University
6:05–6:30 P.M.	BREAK
6:30–7:30 P.M.	DINNER — GRAND BALLROOM CD
7:30–8:30 P.M.	SMALL GROUP SESSIONS (PARTICIPANTS CHOOSE ONE) 1) Tenure Matters: PhD-granting institutions — GRAND BALLROOM A Robert Hilborn, AAPT 2) Tenure Matters: Non-PhD-granting institutions — GRAND BALLROOM B Andy Rundquist, Hamline University

THURSDAY, JUNE 28

7:00–8:00 A.M.	BREAKFAST – HOLIDAY INN RESTAURANT – COLLEGE PARK Hotel Checkout – before 12:00 noon	
8:00–8:45 A.M.	LARGE GROUP SESSION **Grant Opportunities in the NSF Division of Undergraduate Education** Corby Hovis, Division of Undergraduate Education, chovis@nsf.gov Steve Turley, Division of Undergraduate Education, rturley@nsf.gov	GRAND BALLROOM AB
8:50–10:05 A.M.	LARGE GROUP SESSION **Discovering the Resources for Solving Problems** Ted Hodapp, APS and Andy Rundquist, Hamline University	GRAND BALLROOM AB
10:05–10:20 A.M.	BREAK	GRAND BALLROOM FOYER
10:20 –11:35 A.M.	LARGE GROUP SESSION **What Will I Do When I Get Back to the Office?** Robert Hilborn, AAPT	GRAND BALLROOM AB
11:35 –11:55 A.M.	LARGE GROUP SESSION **Final Words, Evaluation Procedures, and Adjourn** Robert Hilborn, AAPT	GRAND BALLROOM AB

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Founded in 1930, AAPT is the premier professional society established to advance the greater good through physics education. With the support of our members worldwide, AAPT is an action oriented organization designed to develop, improve, and promote best practices for physics education as part of the global need for qualified Science, Technology, Engineering, and Mathematics teachers who will inspire tomorrow's leaders and decision makers.

We serve our members through networking, publications, and programs, but also reach out to the larger community of physics and science teachers—current and future—and we look after issues of significance in science education. Our national office works closely with our dedicated volunteers around the world to promote a better understanding of physics at all levels.

AAPT provides networking opportunities through online discussion lists, social media, the Workshops for Physics and Astronomy New Faculty (with APS and AAS); Physics Department Chairs Conference (with APS), and our two national annual meetings. The association supports physics educators through our publications, the *American Journal of Physics* and *The Physics Teacher*; *Physical Review Special topics – Physics Education Research* (with APS and the APS Forum on Education) and the *eNNOUNCER*; NSF-funded programs including the PER User's Guide, the Physics Teacher Education Coalition, PhysTEC (with APS); Physics Teaching Resource Agents institutes; the digital physics library, ComPADRE (with APS and AIP); Physics Program Reviews, and the student programs and scholarships that we administer, including the Lotze Scholarship for Future Teachers.

AMERICAN ASTRONOMICAL SOCIETY

Kevin Marvel
executive officer

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www.aas.org

The American Astronomical Society promotes the advancement of astronomy and closely related branches of science. It was founded in 1899. AAS members include professional researchers in the astronomical sciences, and also educators, students, and others interested in the advancement of astronomical research. The Society operates in five major areas: Publications, Meetings, Education, Public Policy and Employment in order to ensure that astronomy remains healthy and vital for the benefit of our profession and society at large. AAS publishes *The Astrophysical Journal* and *The Astronomical Journal*, which are among the most important scholarly journals in the field. The *Bulletin of the American Astronomical Society* reports the latest institutional developments and documents the content of AAS and its divisions' annual meetings. More information about the Society's activities and membership are available on the AAS website, www.aas.org.

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www.aps.org

With 54,000 members worldwide, the American Physical Society works to advance and disseminate the knowledge of physics. Since its formation in1899, it has been dedicated to providing its members and the international physics community with the latest research results through meetings and the most highly respected international journals in physics. These journals include *Physical Review Letters*, the *Physical Review* (with a journal on Physics Education Research), *Reviews of Modern Physics,* and its newest journals, *Physical Review Applied*, *PRX*, and *Physical Review Fluids*. The APS conducts more than 20 meetings per year, to connect physicists and disseminate physics knowledge and information relevant to the community. In addition, APS vigorously lobbies for funding for physics research and education, provides the physics community with timely information about government affairs, carries out studies of physics-based topics of importance to the country, and promotes the interests of the physics community through extensive public information efforts such as www.PhysicsCentral.com, a website for the public.

APS is actively involved in programs to improve undergraduate and graduate education and to improve the preparation of future physics and physical science teachers through its leadership in the Physics Teacher Education Coalition (www.PhysTEC.org). APS partners with AAPT in PhysTEC and on numerous other education programs, including the New Faculty Workshop, and conferences and workshops on education at various levels. For many years APS has worked to increase diversity in the physics community, and in 2012 launched the APS Bridge Program (www.apsbridgeprogram.org), a national effort to increase the number of underrepresented minorities that receive a PhD in Physics. In addition, APS sponsors the national Conferences for Undergraduate Women in Physics (www.aps.org/cuwip) – a set of regional conferences to encourage participation of women in the discipline.

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AIP's mission is to advance, promote and serve the physical sciences for the benefit of humanity.

AIP offers authoritative information, services, and expertise in physics education and student programs, science communication, government relations, career services for science and engineering professionals, statistical research in physics employment and education, industrial outreach, and the history of physics and allied fields.

AIP Member Societies cover a broad range of fields in the physical sciences and collectively represent more than 120,000 scientists, engineers, educators and students in the global physical sciences community.

This project is supported in part by the National Science Foundation.
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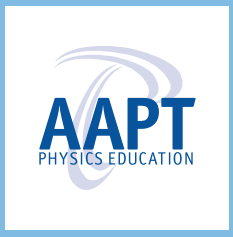

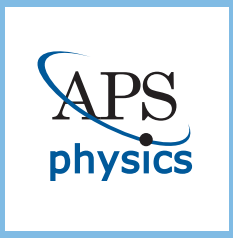

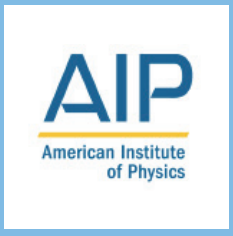

American Association of Physics Teachers

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