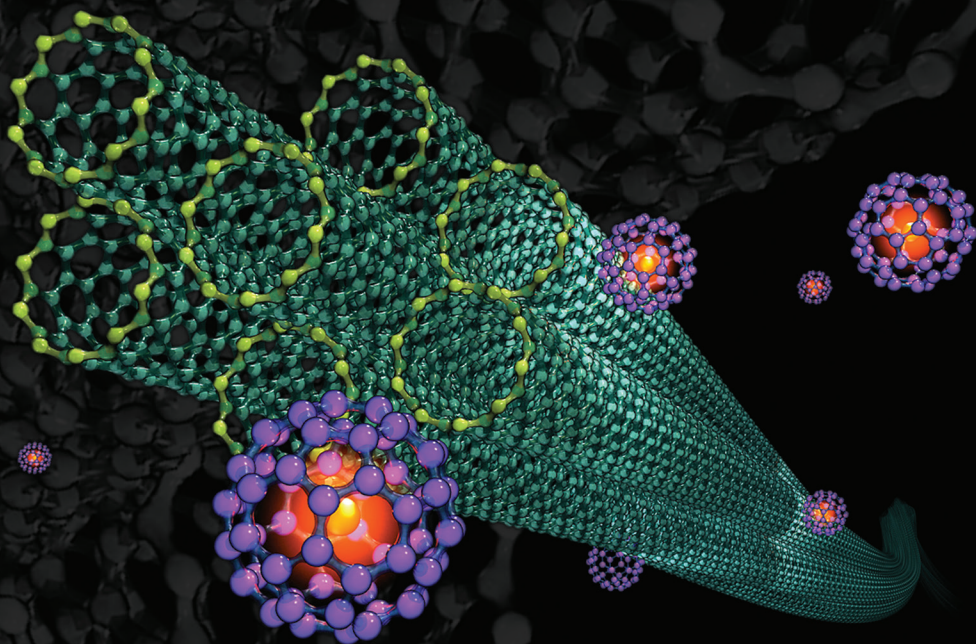


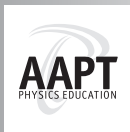
workshop for
**new physics and
astronomy faculty**



NOVEMBER 7-10, 2013

AMERICAN CENTER FOR PHYSICS
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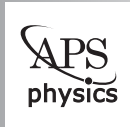
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BREAKOUT I

Mark Pecaut
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BREAKOUT II

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BREAKOUT III

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BREAKOUT I

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BREAKOUT II

John Wise

Georgia Institute of Technology

BREAKOUT III

Ozgur Yavuzcetin

University of Wisconsin-White-water

BREAKOUT I

Erdal Yigit

George Mason University

BREAKOUT II

Changgong Zhou

Lawrence Tech University

BREAKOUT III

THURSDAY, NOVEMBER 7

WORKSHOP SCHEDULE

10:00 A.M.–4:00 P.M.	<p>WORKSHOP REGISTRATION Holiday Inn - College Park, MD</p>	GRAND BALLROOM FOYER
11:45 A.M.–12:45 P.M.	<p>LUNCH BUFFET Holiday Inn - College Park</p>	GRAND BALLROOM FOYER
1:30–3:00 P.M.	<p>OPTIONAL WORKSHOP Grant Opportunities at Research Corporation Richard Wiener, Program Officer, rwiener@rescorp.org</p>	GRAND BALLROOM AB
3:00–4:30 P.M.	<p>OPTIONAL WORKSHOP Grant Opportunities NSF Program Officers: Duncan McBride, Division of Undergraduate Education, dmcbride@nsf.gov Kathleen McCloud, Division of Physics, kmcloud@nsf.gov Daniel Evans, Division of Astronomical Sciences, devans@nsf.gov Dan Finotello, Division of Materials Research, dfinotel@nsf.gov</p>	GRAND BALLROOM AB
4:30–5:00 P.M.	BREAK	GRAND BALLROOM FOYER
5:00–5:15 P.M.	<p>OPENING REMARKS Welcome to the Workshop for New Physics and Astronomy Faculty Robert Hilborn, Associate Executive Officer, AAPT, Chair, New Physics and Astronomy Faculty Workshop Beth Cunningham, Executive Officer, AAPT Kate Kirby, Executive Officer, APS Joel Parriott, Director of Public Policy, AAS Fred Dylla, Executive Director, AIP</p>	GRAND BALLROOM AB
5:15–6:00 P.M.	<p>LARGE GROUP SESSION Introduction to Teaching as a Scholarly Activity Robert Hilborn, Associate Execitove Officer, AAPT</p>	GRAND BALLROOM AB
6:00–7:00 P.M.	DINNER	GRAND BALLROOM FOYER
7:30–8:30 P.M.	<p>LARGE GROUP SESSION Research in Physics Education: A Resource for improving Student Learning Lillian C. McDermott, University of Washington</p>	GRAND BALLROOM AB
8:00–8:45 P.M.	<p>SMALL GROUP SESSIONS Primarily Undergraduate Institution M.S. and Ph.D. Granting Institutions</p>	GRAND BALLROOM AB PRINCE GEORGES ROOM

FRIDAY, NOVEMBER 8

6:30–7:30 A.M.	BREAKFAST - Holiday Inn - College Park	MOOSE CREEK STEAK HOUSE
8:00 A.M.	SHUTTLE BUS LEAVES FOR AMERICAN CENTER FOR PHYSICS	
8:30–9:30 A.M.	LARGE GROUP SESSION	CONFERENCE ROOM A
	How to Get Your Students to Prepare for Every Class Andrew Gavrin, Indiana University-Purdue University-Indianapolis	
9:30–10:30 A.M.	LARGE GROUP SESSION	CONFERENCE ROOM A
	Learner-Centered Teaching in Physics and Astronomy Edward Prather, University of Arizona	
10:30–10:45 A.M.	REFRESHMENT BREAK	ACP ROTUNDA
10:45–11:30 A.M.	SMALL GROUP SESSIONS	
	PhET (I)	CONFERENCE ROOM A
	Kathy Perkins, University of Colorado-Boulder	
	Digital Libraries (II)	CONFERENCE ROOM B
	Bruce Mason, University of Oklahoma	
	Lecture Tutorials (III)	CONFERENCE ROOM C
	Edward Prather, Gina Brissenden, University of Arizona	
11:30 A.M.–12:15 P.M.	SMALL GROUP SESSIONS	
	PhET (III)	CONFERENCE ROOM A
	Digital Libraries (I)	CONFERENCE ROOM B
	Lecture Tutorials (II)	CONFERENCE ROOM C
12:15–1:30 P.M.	GROUP PHOTO AND LUNCH	ACP CAFETERIA
1:30–2:15 P.M.	SMALL GROUP SESSIONS	
	PhET (II)	CONFERENCE ROOM A
	Digital Libraries (III)	CONFERENCE ROOM B
	Lecture Tutorials (I)	CONFERENCE ROOM C
2:30–3:30 P.M.	LARGE GROUP SESSION	CONFERENCE ROOM A
	Evaluation and Assessment Karen Cummings, Southern Connecticut State University	
3:30–4:00 P.M.	REFRESHMENT BREAK	ACP ROTUNDA
4:00–5:00 P.M.	LARGE GROUP SESSION	CONFERENCE ROOM A
	Physics Tutorials Lilliam C. McDermott, University of Washington David Smith, University of North Carolina - Chapel Hill	
5:00–6:00 P.M.	LARGE GROUP SESSION	CONFERENCE ROOM A
	Introduction to Peer Instruction Eric Mazur, Harvard University	
6:00 P.M.	SHUTTLE BUS LEAVES FOR HOLIDAY INN - COLLEGE PARK	
6:30–7:30 P.M.	DINNER - HOLIDAY INN COLLEGE PARK	GRAND BALLROOM AB
7:30–8:30 P.M.	LARGE GROUP SESSION	GRAND BALLROOM AB
	Peer Instruction Practical Details Eric Mazur, Helan Wu, Harvard University	

SATURDAY, NOVEMBER 9

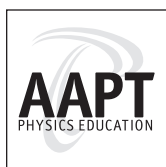
6:30–7:30 A.M.	BREAKFAST - Holiday Inn - College Park	MOOSE CREEK STEAK HOUSE
7:45 A.M.	SHUTTLE BUS LEAVES FOR AMERICAN CENTER FOR PHYSICS	
8:15–9:15 A.M.	LARGE GROUP SESSION	CONFERENCE ROOM A
	Active Learning with Interactive Lecture Demonstrations (ILD) David Sokoloff, University of Oregon Ronald Thornton, Tufts University	
9:15–10:00 A.M.	SMALL GROUP SESSIONS	
	Introductory Physics (III) Various leaders	CONFERENCE ROOM A
	ILD/ Real Time Physics (II) David Sokoloff and Ron Thornton	CONFERENCE ROOM B
	Upper Level Physics (I) Corinne Manogue, Oregon State University	CONFERENCE ROOM C
10:00–10:30 A.M.	BREAK	ACP ROTUNDA
10:30–11:15 A.M.	SMALL GROUP SESSIONS	
	Introductory Physics (I)	CONFERENCE ROOM A
	ILD/ Real Time Physics (III)	CONFERENCE ROOM B
	Upper Level Physics (II)	CONFERENCE ROOM C
11:15–12:00 P.M.	SMALL GROUP SESSIONS	
	Introductory Physics (II)	CONFERENCE ROOM A
	ILD/ Real Time Physics (I)	CONFERENCE ROOM B
	Upper Level Physics (III)	CONFERENCE ROOM C
12:00–1:00 P.M.	LUNCH	ACP CAFETERIA
1:00–2:00 P.M.	LARGE GROUP SESSION	CONFERENCE ROOM A
	Help Your Students Develop Expertise in Problem Solving Ken Heller, University of Minnesota	
2:00–2:45 P.M.	SMALL GROUP SESSIONS	
	<i>Physlets, Easy Java Simulations, and Open Source Physics</i> (III) Mario Belloni, Davidson College	CONFERENCE ROOM A
	<i>Tenure Matters</i> (II) Robert Hilborn, AAPT Steve Turley, Brigham Young University	CONFERENCE ROOM B
	<i>Problem Solving</i> (I) Ken Heller, University of Minnesota	CONFERENCE ROOM C
2:45–3:30 P.M.	SMALL GROUP SESSIONS	
	Physlets/EJS/OSP/ (II)	CONFERENCE ROOM A
	Tenure Matters (I)	CONFERENCE ROOM B
	Problem Solving (III)	CONFERENCE ROOM C
3:30–4:00 P.M.	REFRESHMENT BREAK	ACP ROTUNDA

SATURDAY, NOVEMBER 9 (CONT.)

4:00–4:45 P.M.	SMALL GROUP SESSIONS	
	Physlets/OSP/Ejs (I)	CONFERENCE ROOM A
	Tenure Matters (III)	CONFERENCE ROOM B
	Problem Solving (II)	CONFERENCE ROOM C
5:00 P.M.	SHUTTLE BUS LEAVES FOR HOLIDAY INN - COLLEGE PARK	
5:45–6:45 P.M.	DINNER	ADIRONDACK ROOM
6:45–7:45 P.M.	LARGE GROUP SESSION	
	The Physics IQ Test Dick Berg, University of Maryland	

SUNDAY, NOVEMBER 10

6:30–7:30 A.M.	BREAKFAST - Holiday Inn - College Park MOOSE CREEK STEAK HOUSE	
	Hotel Check-Out - 12:00 noon	
8:00–8:45 A.M.	LARGE GROUP SESSION	
	Case Studies Discussion of Student Behavior Tim Slater, University of Wyoming	
8:45–10:00 A.M.	LARGE GROUP SESSION	
	Diversity and Retention James Stith, American Insititute of Physics (Retired)	
10:00–10:15 A.M.	BREAK	GRAND BALLROOM FOYER
10:15–11:00 A.M.	LARGE GROUP SESSION	
	Time Management Tim Slater	
11:00 –11:30 A.M.	EVALUATION PROCEDURES AND	
	ADJOURNMENT Final Summary	



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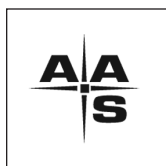
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Founded in 1930, AAPT is the premier professional society established to advance the greater good through physics education. With the support of our members worldwide, AAPT is an action oriented organization designed to develop, improve, and promote 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 New Physics and Astronomy 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.



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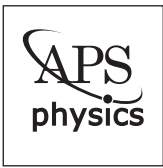
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The American Astronomical Society promotes the advancement of astronomy and closely related branches of science. It was founded in 1899. AAS members include professional researchers in the astronomical sciences, and also educators, students, and others 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.



AMERICAN PHYSICAL SOCIETY

With 50,000 members worldwide, the American Physical Society works to advance and disseminate the knowledge of physics. Since its formation in 1899, 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 Special Topics series including a journal on Physics Education Research), *Reviews of Modern Physics*, and its two newest journals, *Physical Review Applied* and *PRX*. 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, the ComPADRE digital library of educational resources, 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 recently began sponsorship of the Conferences for Undergraduate Women in Physics – regional conferences to encourage participation of women in the discipline. Information about these and other APS programs can be found at www.aps.org

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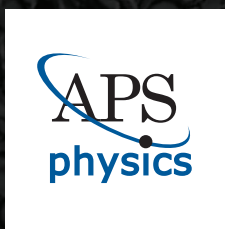
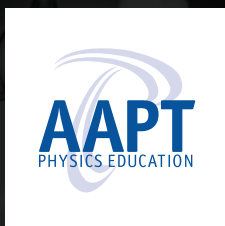
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