

GIREP/National Society of Black Physicists/ National Society of Hispanic Physicists American Association of Chemistry Teachers (AACT)

Meeting Registration Form

How to Register	Registration Fees (circle one) Received by Onsite 6/30/17 7/1-7/26
Mail form to: AAPT Programs & Conferences	Full meeting \$385 \$708
<u> </u>	Under. /Grad. student \$45 \$75
One Physics Ellipse, College Park, MD 20740	1 Day (day?) \$260 \$540
• Fax form to: 301-209-0847	Workshop Only \$85 (non-refundable)
Please indicate your member society:	Family/ Guest Registration: \$40 (Spouse/guest) \$30 Child (7–16 yr) NAME(S): 6 & under free
□ GIREP □ NSHP	Use Workshop Only below if attending Saturday or Sunday workshop without
□ NSBP □ AACT	attending the Meeting Workshop Only (not attending meeting) \$85 plus fee \$
Please provide member number:	(fill out form on next page; write in fee) \$
irst Name	
ast Name	Commercial Workshops (free) (check one)
	□ CW01: Foster Learning, 7/24, 12–1 p.m. □ CW02: PASCO, 7/24, 12–1 p.m.
	 CW03: PASCO, 7/24, 1:30–2:30 p.m. CW04: PASCO, 7/24, 3–4 p.m CW06: Perimeter Institute, 7/25, 12–1 p.m. CW07: Vernier, 7/25, 12–2 p.m.
State/Province	□ CW08: Expert TA, 7/24, 12–1 p.m. □ CW09: Cengage, 7/25, 12–1 p.m.
CountryZip/Postal Code	CW10: Perimeter, 7/24, 3–4 p.m. CW11: Perimeter, 7/24, 1:30–2:30 p.m.
nstitution:	☐ CW12: Perimeter, 7/25, 1:30–2:30 p.m.
mail	Special Events (optional)
Emergency Contact	1. Cincinnati Reds Stadium Tour # Persons —— @\$22 \$
hone: Home Work ()	Saturday, July 22, 1:30 –2:30 p.m.
ax Home Work ()	2. First Timers Gathering # Persons (free) Monday, July 24, 7–8:30 a.m.
Type of school affiliation:	3. Spouse/Guest Gathering # Persons (free)
1 High Sahaal Two Vaer College T Four Vaer College T Other	Monday, July 24, 9–10 a.m. 4. Early Career Professionals Speed Networking Event # Persons (free)
Disabilities/ Special Needs	Monday, July 24, 12–1:30 p.m.
5	5. High School Physics Teachers Luncheon # Persons @\$40 \$ Monday, July 24, 12–1:30 p.m.
Please print clearly.	 6. Meet-up for Members and Supporters of LGBTQ Community
rease print crearry.	Monday, July 24, 12–1:30 p.m. # Persons (free) 7. Game Room Night # Persons (free)
Visa MasterCard Discover Am. Express	Monday, July 24, 9–12 p.m.
Account Number	8. Evening Tour of the Cincinnati Observatory # Persons@\$25 \$ Sunday, July 23, 10:15–11:30 p.m.
	☐ 9. AAPT Fun Run/Walk # Persons@\$30 \$
Expiration Date	Tuesday, July 25, 6–8 a.m. 10. Two-Year College Breakfast # Persons@\$35 \$
Security Code	Tuesday, July 25, 7–8:30 a.m.
Name on Card	Wednesday, July 26, 12–1:30 p.m.
Signature:	12. A Night on the Banks of the Ohio River # Persons @\$47 \$
	Tuesday, July 25, 6:30–8 p.m. 13. Monday Raffles: Headphones 10:20 a.m. # @ \$2 ea. \$
If something comes up and you simply can't attend, all requests for cancellation must be made in writing by the following dates and the	Echo Dot 3:50 p.m. #@ \$2 ea. \$ 14. Tuesday Raffles: \$100 Gift card 10:20 a.m.#@\$2 ea. \$
following fees will apply:	Kindle Fire 3:50 p.m. #@\$2 ea. \$
Cancellations by May 31, 2017 Midnight EST = \$75	15. Pub Crawl # Persons @\$5 \$ Tuesday, July 25, 9:30-midnight
	☐ 16. Effects of the Sun: Planetarium Show # Persons (free)
Cancellations from June 1, 2017 to June 22, 2017 = \$100	Saturday, July 22, 6:30–9:30 p.m. 17. PER Conference & Reception # Persons @\$155 \$
Cancellations June 23 – July 6, 2017 = \$125	Wednesday, Thursday, July 26–27 Students: \$100
No Refunds after July 6, 2017	□ 18. PER Poster Session & Reception Only #Persons @\$30 \$ Wednesday, July 26, 8–10 p.m.
Photo Release: AAPT and its legal representatives and assigns, retain	Registration Fee \$
the right and permission to publish, without charge, photographs taken	Workshop Fee(s)
during this event. These photographs may be used in publications, includ- ing electronic publications, or in audio-visual presentations, promotional	Special Events Fee(s) \$
literature, advertising, or in other similar ways.	
Attendee emails will be shared with conference exhibitors.	TOTAL: \$
Attoriado dilialio Will de Silarea Will collectore exhibitors.	Make checks payable to AAPT;

Purchase Order No.____



Workshop Registration Form

Registration for workshops is first-come, first-served, so register early to secure a place in the workshop of your choice. Please use a checkmark for your initial choices, then indicate subsequent choices (in case first choice is unavailable) numerically. No form received after July 6, 2017 will be accepted in the Executive Office for processing. Workshop abstracts can be found online at www.aapt.org/Conferences/sm2017/workshops.cfm.

NAME

(Use checkmarks for 1st choices, then rank subsequent choices numerically . . . 1, 2, 3, etc.)

All workshops will be held at the University of Cincinnati

AAOI	kshops, Saturday July 22	Time	Fees		
				Mem.	Non-Mem
W01	Designing Circuits Activities for Middle School Students	8:00 a.m.–12:00 p.m.	W01:	\$70	\$95
W02	Making High Speed Videos	-	W02:	\$60	\$85 _
W03	Mathematical Modeling with Desmos	8:00 a.m.–12:00 p.m.	W03:	\$60	\$85
W04	iMobile Physics and iPhysics Classroom		W04:	\$60	\$85 -
W05	Make and Take Low Cost Spectrograph for Physics Labs		W05:	\$85	\$110 _
W06	Modern Physics Labs on a Budget Using LEDs and Mixed Signal Processors	8:00 a.m.–12:00 p.m.	W06:	\$85	\$110
W07	"Can We Have a Group Test?" Designing Collaborative, Active, Alternative				
	Assessments for Physics Classes	-	W07:	\$60	\$85
V08	Introductory Labs for Electricity and Magnetism	-	W08:	\$72	\$97 _
V11	Activity-based Physics in the Advanced High School Classroom		W11:	\$75	\$120
W12	Physics Activities for the Life Sciences (PALS)		W12:	\$85	\$110
V13	Learn Physics While Practicing Science: Introduction to ISLE		W13:	\$95	\$120
V14	The Perplexed Physicists' Primer on Teaching Astronomy		W14:	\$85	\$110 _
V17	Low-Cost Open-Source Laboratory Instruments		W17:	\$60	\$85
V18	Physics of Toys		W18:	\$61	\$86
V19	Computational Modeling with GlowScript and VPython	1:00 p.m.–5:00 p.m.	W19:	\$60	\$85
V20	Examining the Relationships among Intuition, Reasoning, and Conceptual				
	Understanding in Physics		W20:	\$60	\$85
V21	An Example of Tutorials for Upper-division Physics Courses: Quantum Mechanics		W21:	\$65	\$90
V22	PIRA Lecture Demonstrations I & II Condensed: Selections from the PIRA 200		W22:	\$95	\$120
V23	An Introduction to Race, Ethnicity, and Equity in Physics Education		W23:	\$65	\$90
V24	Student Activities from the IceCube Neutrino Experiment	1:00 p.m.–5:00 p.m.	W24:	\$60	\$85
Wor	kshops, Sunday, July 23	Time		Fee	es
V27	High Altitude Ballooning	8:00 a.m.–12:00 p.m.	W27:	\$75	\$100
V28					
	Physics Invention Tasks: Developing Mathematical Creativity as a Scientific Practice.	8:00 a.m.–12:00 p.m.	W28:	\$60	\$85
V30	Physics Invention Tasks: Developing Mathematical Creativity as a Scientific Practice. Fun and Engaging Labs	•	W28: W30:	\$60 \$60	\$85 \$85
		8:00 a.m.–12:00 p.m.			
V31	Fun and Engaging Labs	8:00 a.m.–12:00 p.m. 8:00 a.m.–12:00 p.m.	W30:	\$60	\$85
W31 W32	Fun and Engaging Labs	8:00 a.m.–12:00 p.m. 8:00 a.m.–12:00 p.m. 8:00 a.m.–12:00 p.m.	W30: W31:	\$60 \$70	\$85 \$95
V31 V32 V33	Fun and Engaging Labs	8:00 a.m.–12:00 p.m. 8:00 a.m.–12:00 p.m. 8:00 a.m.–12:00 p.m.	W30: W31: W32:	\$60 \$70 \$60	\$85
V31 V32 V33	Fun and Engaging Labs Using Minecraft to Teach Physics What Every Physics Teacher Should Know About Cognitive Research Workshop on Intermediate-Level, Interdisciplinary Instruction in Biological Physics	8:00 a.m12:00 p.m. 8:00 a.m12:00 p.m. 8:00 a.m12:00 p.m. 8:00 a.m12:00 p.m.	W30: W31: W32:	\$60 \$70 \$60	\$85
V31 V32 V33 V34	Fun and Engaging Labs	8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m.	W30: W31: W32: W33:	\$60 \$70 \$60 \$60	\$85 _ \$95 _ \$85 _ \$85 _
V31 V32 V33 V34	Fun and Engaging Labs	8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m.	W30: W31: W32: W33: W34: W35:	\$60 \$70 \$60 \$60	\$85
V31 V32 V33 V34 V35 V37	Fun and Engaging Labs Using Minecraft to Teach Physics What Every Physics Teacher Should Know About Cognitive Research Workshop on Intermediate-Level, Interdisciplinary Instruction in Biological Physics Fun, Engaging, and Effective Labs and Demos in Electricity, Magnetism and Optics with Clickers, Video Analysis, and Computer-based Tools Explore Your Assessment Data with the PhysPort Data Explorer	8:00 a.m12:00 p.m8:00 a.m12:00 p.m.	W30: W31: W32: W33: W34: W35:	\$60 \$70 \$60 \$60 \$75 \$60	\$85
/31 /32 /33 /34 /35 /37 /38	Fun and Engaging Labs Using Minecraft to Teach Physics What Every Physics Teacher Should Know About Cognitive Research Workshop on Intermediate-Level, Interdisciplinary Instruction in Biological Physics Fun, Engaging, and Effective Labs and Demos in Electricity, Magnetism and Optics with Clickers, Video Analysis, and Computer-based Tools Explore Your Assessment Data with the PhysPort Data Explorer Periscope: Looking Into Learning in Best-Practices Physics Classrooms Intermediate and Advanced Laboratories Making Videos as Projects	8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m1:00 p.m5:00 p.m1:00 p.m5:00 p.m.	W30: W31: W32: W33: W34: W35:	\$60 \$70 \$60 \$60 \$75 \$60 \$60 \$85	\$85
V31 V32 V33 V34 V35 V37 V38 V39	Fun and Engaging Labs Using Minecraft to Teach Physics What Every Physics Teacher Should Know About Cognitive Research Workshop on Intermediate-Level, Interdisciplinary Instruction in Biological Physics Fun, Engaging, and Effective Labs and Demos in Electricity, Magnetism and Optics with Clickers, Video Analysis, and Computer-based Tools Explore Your Assessment Data with the PhysPort Data Explorer Periscope: Looking Into Learning in Best-Practices Physics Classrooms Intermediate and Advanced Laboratories	8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m1:00 p.m5:00 p.m1:00 p.m5:00 p.m.	W30: W31: W32: W33: W34: W35: W37:	\$60 \$70 \$60 \$60 \$75 \$60 \$60 \$85	\$85
V31 V32 V33 V34 V35 V37 V38 V39 V40	Fun and Engaging Labs Using Minecraft to Teach Physics What Every Physics Teacher Should Know About Cognitive Research Workshop on Intermediate-Level, Interdisciplinary Instruction in Biological Physics Fun, Engaging, and Effective Labs and Demos in Electricity, Magnetism and Optics with Clickers, Video Analysis, and Computer-based Tools Explore Your Assessment Data with the PhysPort Data Explorer Periscope: Looking Into Learning in Best-Practices Physics Classrooms Intermediate and Advanced Laboratories Making Videos as Projects	8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m1:00 p.m5:00 p.m1:00 p.m5:00 p.m.	W30: W31: W32: W33: W34: W35: W37: W38: W39:	\$60 \$70 \$60 \$60 \$75 \$60 \$60 \$85 \$60	\$85
V31 V32 V33 V34 V35 V37 V38 V39 V40	Fun and Engaging Labs	8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m1:00 p.m5:00 p.m1:00 p.m5:00 p.m1:00 p.m5:00 p.m.	W30: W31: W32: W33: W34: W35: W37: W38: W39:	\$60 \$70 \$60 \$60 \$75 \$60 \$60 \$85 \$60	\$85
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V31 V32 V33 V34 V35 V37 V38 V39 V40 V41	Fun and Engaging Labs Using Minecraft to Teach Physics What Every Physics Teacher Should Know About Cognitive Research Workshop on Intermediate-Level, Interdisciplinary Instruction in Biological Physics Fun, Engaging, and Effective Labs and Demos in Electricity, Magnetism and Optics with Clickers, Video Analysis, and Computer-based Tools Explore Your Assessment Data with the PhysPort Data Explorer Periscope: Looking Into Learning in Best-Practices Physics Classrooms Intermediate and Advanced Laboratories Making Videos as Projects Don't Lecture Me: Tutorial-based Curricula for Teaching Advanced Placement Physics Making Waves with NASA: Culturally Responsive Instructional Approaches for Teaching Physical Science Concepts in Middle and High School Using Jupyter Notebook to Teach Physics with Computation Developing the Next Generation of Physics Assessments	8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m1:00 p.m5:00 p.m1:00 p.m5:00 p.m1:00 p.m5:00 p.m1:00 p.m5:00 p.m1:00 p.m5:00 p.m.	W30: W31: W32: W33: W34: W35: W37: W38: W40:	\$60 \$70 \$60 \$60 \$75 \$60 \$60 \$85 \$60 \$65	\$85
W31 W32 W33 W34 W35 W37 W38 W40 W41	Fun and Engaging Labs Using Minecraft to Teach Physics What Every Physics Teacher Should Know About Cognitive Research Workshop on Intermediate-Level, Interdisciplinary Instruction in Biological Physics Fun, Engaging, and Effective Labs and Demos in Electricity, Magnetism and Optics with Clickers, Video Analysis, and Computer-based Tools Explore Your Assessment Data with the PhysPort Data Explorer Periscope: Looking Into Learning in Best-Practices Physics Classrooms Intermediate and Advanced Laboratories Making Videos as Projects Don't Lecture Me: Tutorial-based Curricula for Teaching Advanced Placement Physics Making Waves with NASA: Culturally Responsive Instructional Approaches for Teaching Physical Science Concepts in Middle and High School Using Jupyter Notebook to Teach Physics with Computation	8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m8:00 a.m12:00 p.m1:00 p.m5:00 p.m1:00 p.m5:00 p.m1:00 p.m5:00 p.m1:00 p.m5:00 p.m1:00 p.m5:00 p.m.	W30: W31: W32: W33: W35: W37: W38: W39: W40:	\$60 \$70 \$60 \$60 \$75 \$60 \$60 \$85 \$60 \$65	\$85
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