

American Association of Physics Teachers

Two-Year College Day Registration Form for First-Time AAPT Meeting Attendees

• Tuesday, July 31, 2018

Registration fees				
Attendee One-Day Registration: <u>\$85</u>				
□ Member No.: □ Non-n	nember			
First Name	Last Name			
School Name				
Address				
City	State		_Zip	
Email				
Phone: Home Work ()				
Fax				
Emergency ContactPhon	e No:			
 Check applicable boxes Attending for the first time Becoming an AAPT member Renewing my membership Disabilities/ Special Needs				
Total Fees Check made out to AAPT	Registration Fee (S	\$85)		\$
Money Order	Guest Fee \$82 (Inc		tion & lunch)	\$
Credit Card Purchase Order No	Children \$72 (Incl	udes registrati	on & lunch)	\$
Please print clearly.	Workshop fees:			\$
	Tuesday Raffles			@ \$3 ea. \$
Visa MasterCard Discover Am. Express Account Number		PM	#	@ \$2 ea. \$
Expiration Date	TOTAL:			\$
Sec. Code				
Name on Card				
Signature:				

Photo Release: AAPT and its legal representatives and assigns, retain the right and permission to publish, without charge, photographs taken during this event. These photographs may be used in publications, including electronic publications, or in audio-visual presentations, promotional literature, advertising, or in other similar ways. **Attendee emails will be shared with conference exhibitors.**

There will be a **\$30** processing fee for all canceled registrations.

Mail form to: AAPT Programs and Conferences, One Physics Ellipse, College Park, MD 20740; Fax: 301-209-0845

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 18, 2018 will be accepted in the Executive Office for processing. Workshop abstracts can be found online at www.aapt.org/Conferences/sm2018/workshops.cfm.

(Use checkmarks for 1st choices, then rank subsequent choices numerically ... 1, 2, 3, etc.) All workshops will be held at George Washington University — Tutorials at Marriott Renaissance

SUMMER MEETING July 28-Aug. 1 Washington, DC

PHYSICS EDUCATION

Work	shops, Saturday, July 28 Time		Fees	
			Mem. Non-Men	
W01	Developing and Implementing NGSS Three-Dimensional High School Physics Lessons .8:00 a.m12:00 p.m.	W01:	\$60 \$85 _	
W02	Night Sky Network	W02:	\$110 \$135 -	
W03	Preparing for Policy and Advocacy	W03:	\$60 \$85 _	
W04	PIRA Lecture Demonstrations I & II Condensed: Selections from the PIRA 200	W04:	\$95 \$120 _	
W05	Research-based Approaches to Infusing Argumentation in Undergraduate Physics8:00 a.m12:00 p.m.	W05:	\$65 \$90 _	
W10	"Can We Have a Group Test?" Designing Collaborative, Active, Alternative			
	Assessments for Physics Classes	W10:	\$85 \$110 -	
W11	Using Arduino for High Altitude Ballooning	W11:	\$110 \$135 -	
W12	Physics Activities for the Life Sciences (PALS)	W12:	\$85 \$110 -	
W13	Learn Physics While Practicing Science: Introduction to ISLE	W13:	\$88 \$113 _	
N14	Creating Mobile Physics Apps with EJS	W14:	\$85 \$110 _	
V17	Integrated STEM Education: Infusing Engineering Design Practices in STEM Learning .1:00 p.m5:00 p.m.	W17:	\$80 \$105 _	
V18	Introductory Labs for Thermal Physics1:00 p.m5:00 p.m.	W18:	\$72 \$97	
W19	Network Analysis in PER1:00 p.m5:00 p.m.	W19:	\$60 \$85	
W20	Modern Physics Labs on a Budget Using LEDs and Mixed Signal Processors1:00 p.m5:00 p.m.	W20:	\$80 \$105	
W21	LIGO and Interferometers	W21:	\$80 \$105	
W22	Arduinos and Underwater ROVs1:00 p.m5:00 p.m.	W22:	\$180 \$205 _	

T01PTRA: Cartoon Physics $8:00 \text{ a.m.} - 10:00 \text{ a.m.}$ T01:\$60\$85T02Teaching a Blended Course with Existing Resources on edX.org $8:00 \text{ a.m.} - 10:00 \text{ a.m.}$ T02:\$60\$85W24PTRA: Robotics $8:00 \text{ a.m.} - 12:00 \text{ p.m.}$ W24:\$85\$110W25Coding Integration in High School STEM Courses $8:00 \text{ a.m.} - 12:00 \text{ p.m.}$ W25:\$30\$55W26Designing and Assessing Informal Physics Programs $8:00 \text{ a.m.} - 12:00 \text{ p.m.}$ W25:\$60\$85W27Integrating Modern Physics into the High School Physics Curriculum $8:00 \text{ a.m.} - 12:00 \text{ p.m.}$ W26:\$60\$85W273D Solid Modeling Workshop. $8:00 \text{ a.m.} - 12:00 \text{ p.m.}$ W28:\$90\$115W293D Solid Modeling Workshop. $8:00 \text{ a.m.} - 12:00 \text{ p.m.}$ W28:\$60\$85W30Using Social Psychological Interventions to Improve Learning of all Students $8:00 \text{ a.m.} - 12:00 \text{ p.m.}$ W31:\$65\$90W32Fun and Engaging Labs. $8:00 \text{ a.m.} - 12:00 \text{ p.m.}$ W31:\$65\$85\$85W33PICUP: Integrating Computation into Undegraduate Physics $8:00 \text{ a.m.} - 12:00 \text{ p.m.}$ W32:\$60\$85W34Fun. Engaging, and Effective Labs and Demos in Electricity, Magnetism and Optics $8:00 \text{ a.m.} - 12:00 \text{ p.m.}$ W33:\$60\$85W35STEP UP for Waree $8:00 \text{ a.m.} - 12:00 \text{ p.m.}$ W34:\$75\$100W35Sefoe S85 $1:00 \text{ p.m.} -5:0$	Work	shops, Sunday, July 29 Time		Fees	
W24 PTRA: Robotics 8:00 a.m12:00 p.m. W24: \$85 \$110 W25 Coding Integration in High School STEM Courses 8:00 a.m12:00 p.m. W25: \$30 \$855 W26 Designing and Assessing Informal Physics Programs 8:00 a.m12:00 p.m. W26: \$60 \$85 W27 Integrating Modern Physics into the High School Physics Curriculum 8:00 a.m12:00 p.m. W27: \$60 \$85 W28 S90 \$115 \$60 \$85 \$115 W29 3D Solid Modeling Workshop. 8:00 a.m12:00 p.m. W29: \$61 \$86 W30 Using Social Psychological Interventions to Improve Learning of all Students 8:00 a.m12:00 p.m. W30: \$60 \$85 W31 Physics Resources for K-8 from NASA. 8:00 a.m12:00 p.m. W31: \$65 \$90 W32 Fun and Engaging Labs 8:00 a.m12:00 p.m. W33: \$80 \$105 W33 PICUP: Integrating Computation into Undergraduate Physics. 8:00 a.m12:00 p.m. W33: \$80 \$105 W34 Fun, Engaging, and Effective Labs and Demos in Electricity, Magnetism and Optics with Clickers, Video Analysis, and C	T01	PTRA: Cartoon Physics	T01:	\$60	\$85
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W26 Designing and Assessing Informal Physics Programs 8:00 a.m12:00 p.m. W26: \$60 \$85 W27 Integrating Modern Physics into the High School Physics Curriculum 8:00 a.m12:00 p.m. W27: \$60 \$85 W28 PIRA: Procuring Apparatus for Outreach Shows 8:00 a.m12:00 p.m. W28: \$90 \$115 W29 DS olid Modeling Workshop 8:00 a.m12:00 p.m. W30: \$60 \$85 W30 Using Social Psychological Interventions to Improve Learning of all Students 8:00 a.m12:00 p.m. W31: \$65 \$90 W32 Fun and Engaging Labs 8:00 a.m12:00 p.m. W33: \$60 \$85 W33 PICUP: Integrating Computation into Undergraduate Physics. 8:00 a.m12:00 p.m. W33: \$60 \$85 W33 Fun, Engaging, and Effective Labs and Demos in Electricity, Magnetism and Optics with Clickers, Video Analysis, and Computer-Based Tools 8:00 a.m12:00 p.m. W33: \$60 \$85 W35 STP UP for Women Stoto manual physics 8:00 a.m12:00 p.m. W33: \$60 \$85 W35 Stotering Inclu	W24	PTRA: Robotics	W24:	\$85	\$110
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W28 PIRA: Procuring Apparatus for Outreach Shows 8:00 a.m12:00 p.m. W28: \$90 \$115 W29 3D Solid Modeling Workshop 8:00 a.m12:00 p.m. W29: \$61 \$86 W30 Using Social Psychological Interventions to Improve Learning of all Students 8:00 a.m12:00 p.m. W30: \$60 \$85 W31 Physics Resources for K-8 from NASA 8:00 a.m12:00 p.m. W31: \$65 \$90 W32 Fun and Engaging Labs 8:00 a.m12:00 p.m. W32: \$60 \$85 W33 PICUP: Integrating Computation into Undergraduate Physics. 8:00 a.m12:00 p.m. W33: \$80 \$105 W34 Fun, Engaging, and Effective Labs and Demos in Electricity, Magnetism and Optics with Clickers, Video Analysis, and Computer-Based Tools 8:00 a.m12:00 p.m. W34: \$75 \$100 W35 STEP UP for Women 8:00 a.m12:00 p.m. W35: \$60 \$85 \$85 W36 Protering Your Materials for Inclusion in the Living Physics Portal 8:00 a.m12:00 p.m. W36: \$60 \$85 W37 Interdisciplinary Instruction in Biological Physics 1:00 p.m5:00 p.m. W38: \$60 \$85 <td>W26</td> <td>Designing and Assessing Informal Physics Programs</td> <td>W26:</td> <td>\$60</td> <td>\$85</td>	W26	Designing and Assessing Informal Physics Programs	W26:	\$60	\$85
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W32Fun and Engaging Labs	W30	Using Social Psychological Interventions to Improve Learning of all Students8:00 a.m12:00 p.m.	W30:	\$60	\$85 —
 W33 PICUP: Integrating Computation into Undergraduate Physics	W31	Physics Resources for K-8 from NASA	W31:	\$65	\$90 —
 W34 Fun, Engaging, and Effective Labs and Demos in Electricity, Magnetism and Optics with Clickers, Video Analysis, and Computer-Based Tools W35 STEP UP for Women W36 Preparing Your Materials for Inclusion in the Living Physics Portal W37 Preparing Your Materials for Inclusion in the Living Physics Portal W38 Fostering Inclusivity in Physics: Resources, Strategies, and Interventions W39 Interdisciplinary Instruction in Biological Physics W40 Tying Activity Based Physics Bits & Pieces to NGSS W41 Intermediate and Advanced Labs W42 Getting Students to Think Critically in Intro Labs W43 Effective Practices for Final Projects in Undergraduate Physics Lab Courses W44 Examining the Relationships among Intuition, Reasoning, and Conceptual Understanding in Physics M45 An Introduction to Race, Ethnicity, and Equity in Physics Education W46 Ready to Go Public with Your Writing? Developing Writing Ideas for Publication W47 Physics and Toys II: Energy, Momentum, Electricity, and Magnetism W48 Improving the Pedagogical Content Knowledge of Teaching Assistants and Instructors W49 Demo Kit in a Box: Optics. W40 Sus Optics W41 Demo Kit in a Box: Optics. W41 Sus Optics W42 Sus Optics W43 Demo Kit in a Box: Optics. W44 Demo Kit in a Box: Optics. W45 Sus Optics W46 Ready CP PResources in the Classroom W47 Demo Kit in a Box: Optics. W48 Demo Kit in a Box: Optics. W49 Demo Kit in a Box: Optics. W40 Demo Kit in a Box: Optics. W41 Sus Optics. W42 Sus Optics. W43 Demo Kit in a Box: Optics. W44 Demo Kit in a Box: Optics. W45 Demo Kit in a Box: Optics. W45 Optics. W45 Demo Kit in a Box: Optics. <	W32	Fun and Engaging Labs	W32:	\$60	\$85 —
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W38Fostering Inclusivity in Physics: Resources, Strategies, and Interventions1:00 p.m5:00 p.m.W38:\$60\$85W39Interdisciplinary Instruction in Biological Physics1:00 p.m5:00 p.m.W39:\$60\$85W40Tying Activity Based Physics Bits & Pieces to NGSS1:00 p.m5:00 p.m.W40:\$80\$105W41Intermediate and Advanced Labs1:00 p.m5:00 p.m.W41:\$85\$110W42Getting Students to Think Critically in Intro Labs1:00 p.m5:00 p.m.W42:\$62\$87W43Effective Practices for Final Projects in Undergraduate Physics Lab Courses1:00 p.m5:00 p.m.W42:\$60\$85W44Examining the Relationships among Intuition, Reasoning, and Conceptual Understanding in Physics1:00 p.m5:00 p.m.W44:\$60\$85W45An Introduction to Race, Ethnicity, and Equity in Physics Education1:00 p.m5:00 p.m.W44:\$65\$90W46Ready to Go Public with Your Writing? Developing Writing Ideas for Publication1:00 p.m5:00 p.m.W46:\$75\$100W47Physics and Toys II: Energy, Momentum, Electricity, and Magnetism1:00 p.m5:00 p.m.W48:\$60\$85\$85W49Demo Kit in a Box: Optics1:00 p.m5:00 p.m.W48:\$60\$85\$85W49Using CPEP Resources in the Classroom1:00 p.m5:00 p.m.W48:\$60\$85\$85	W35		W35:	\$60	\$85
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W40Tying Activity Based Physics Bits & Pieces to NGSS1:00 p.m5:00 p.m.W40:\$80\$105W41Intermediate and Advanced Labs1:00 p.m5:00 p.m.W41:\$85\$110W42Getting Students to Think Critically in Intro Labs1:00 p.m5:00 p.m.W41:\$85\$110W43Effective Practices for Final Projects in Undergraduate Physics Lab Courses1:00 p.m5:00 p.m.W42:\$62\$87W44Examining the Relationships among Intuition, Reasoning, and Conceptual Understanding in Physics1:00 p.m5:00 p.m.W44:\$60\$85W45An Introduction to Race, Ethnicity, and Equity in Physics Education1:00 p.m5:00 p.m.W44:\$65\$90W46Ready to Go Public with Your Writing? Developing Writing Ideas for Publication1:00 p.m5:00 p.m.W46:\$75\$100W47Physics and Toys II: Energy, Momentum, Electricity, and Magnetism1:00 p.m5:00 p.m.W47:\$65\$90W48Improving the Pedagogical Content Knowledge of Teaching Assistants and Instructors1:00 p.m5:00 p.m.W48:\$60\$85W49Demo Kit in a Box: Optics1:00 p.m5:00 p.m.W48:\$60\$85100W50Using CPEP Resources in the Classroom1:00 p.m5:00 p.m.W49:\$85\$110	W38	Fostering Inclusivity in Physics: Resources, Strategies, and Interventions1:00 p.m5:00 p.m.	W38:	\$60	\$85
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W49 Demo Kit in a Box: Optics	W47	Physics and Toys II: Energy, Momentum, Electricity, and Magnetism1:00 p.m5:00 p.m.	W47:	\$65	\$90 —
W50 Using CPEP Resources in the Classroom	W48	Improving the Pedagogical Content Knowledge of Teaching Assistants and Instructors 1:00 p.m. – 5:00 p.m.	W48:	\$60	\$85 —
W50 Using CPEP Resources in the Classroom	W49	Demo Kit in a Box: Optics	W49:	\$85	\$110
W51 Field Trip to the Air and Space Museum	W50		W50:	\$60	\$85
	W51	Field Trip to the Air and Space Museum	W51:	FREE	E

