

## **Meeting Registration Form**

Make checks payable to AAPT; No credit cards accepted

Purchase Order No.\_

How to Register	Registration Fees (check one) Early Bird Advanced by 11/14/18 by 12/20/18	Onsite 12/21–1/1				
Register online at www.aapt.org	AAPT Member – Full meeting \$390 \$520	\$720				
• Fax form to 301-209-0845	AAPT Member – Retired/Emer./Lifetime \$290 \$455	\$635				
<ul> <li>Mail form to: AAPT Programs &amp; Conferences</li> </ul>	Non-member – Full meeting \$615 \$745	\$950				
One Physics Ellipse, College Park, MD 20740	Under. /Grad. student AAPT members \$45 \$55	\$75				
	AAPT Member – 1 Day (day?) \$260 \$395	\$550				
☐ Member Member No.: ☐ Nonmember	Non-member – 1 Day (day?) \$485 \$625	\$775				
First Name	High School Students Complimentary Workshop Only \$85					
Last Name	11.1	(0_16 vr)				
Address	NAME(C).	(0 10 j1)				
Autress	Members and Non-members, use Workshop Only below if attending S Sunday workshop without attending the Meeting	Members and Non-members, use Workshop Only below if attending Saturday or				
CityState/Province	· · · · · · · · · · · · · · · · · · ·					
CountryZip/Postal Code	(611 ) (6					
	Operation Workshop (first)					
Institution:						
Email						
Emergency Contact	Special Events (optional)					
Phone:	1. Undergraduate Meetup	(free)				
Fax	Saturday, Jan. 12, 5:30–7 p.m.					
	2 1 That Time to Cathering # 1 crossis	(free)				
Check applicable boxes	Sunday, Jan. 13, 7–8:30 a.m.  3. Spouse/Guest Gathering # Persons	(free)				
<ul> <li>Attending for the first time</li> <li>Becoming an AAPT member</li> </ul>	Sunday, Jan. 13, 9–10 a.m.	( /				
<ul><li>Renewing my membership</li></ul>	4. Early Career Professionals Speed Networking Event # Persons	(free)				
Type of school affiliation:	Sunday, Jan. 13, 12:30–2 p.m.  5. K-12 Teachers Day Luncheon # Persons	(fee TBD				
☐ High School ☐ Two-Year College ☐ Four-Year College ☐ Other		(ICC TDD)				
Inglisence B two real conege B roal real conege B out	6. Multi-Cultural Luncheon # Persons	(fee TBD)				
Disabilities/ Special Needs	Sunday, Jan. 13, 12:30–2 p.m.					
	7. Meet-up for Members and Supporters of LGBTQ Community Sunday, Jan. 13, 12–1:30 p.m. # Persons	(free)				
	8. Game Night # Persons	(free)				
	Sunday, Jan. 13, 9–12 p.m.					
	9. Retired Physicist Luncheon # Persons Sunday, Jan. 13, 12-1:30 p.m.	(free)				
If something comes up and you simply can't attend, all requests for	□ 10. AAPT Fun Run/Walk # Persons@\$3	30 \$				
cancellation must be made in writing by the following dates and the	Monday, Jan. 14, 6–8 a.m.					
following fees will apply:	<ul> <li>☐ 11. Monday AM Raffle #_ @ \$3 ea.</li> <li>☐ 12. Monday PM Raffle #_ @ \$3 ea.</li> </ul>	\$				
Cancellations by Nov. 1, 2018 Midnight EST = \$75	12. Monday FM Karne #_ @ \$3 ea.	\$ \$				
Cancellations by Dec. 19, 2018 = \$100	☐ 14. Tuesday PM Raffle #_ @\$3 ea.	\$				
Cancellations from Dec. 21– Jan. 4, 2019 = \$125						
No Refunds after Jan. 4, 2019	Designation Fee	¢				
<b>Photo Release:</b> AAPT and its legal representatives and assigns, retain	Registration Fee Workshop Fee(s)	\$ \$				
the right and permission to publish, without charge, photographs taken during this event. These photographs may be used in publications, includ-	Special Events Fee(s)	\$				
ing electronic publications, or in audio-visual presentations, promotional	\$10 Administration Fee	\$_10				
literature, advertising, or in other similar ways.	TOTAL					
Attendee emails will be shared with conference exhibitors.	TOTAL:	\$				





## **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 December 21 will be accepted in the Executive Office for processing. Workshop abstracts can be found online at www.aapt.org/Conferences/wm2019/workshops.cfm.

## NAME

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

All workshops will be held at the University of Houston

in Just 4 Hours 8.00 a.m12:00 p.m. W01: \$70 \$95 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10	Worl	kshops, Saturday, January 12	Time			Fees
in Just 4 Hours.  8:00 a.m12:00 p.m. W01: \$70 \$95 W02 \$TEP UP for Women  8:00 a.m12:00 p.m. W02: \$60 \$85 W03 Introduction to LaTeX for Teachers and Students  8:00 a.m12:00 p.m. W03: \$60 \$85 W04 PTRA: Quantum Cryptography: An Applied Way to Teach the Basics of Quantum Mechanics.  8:00 a.m12:00 p.m. W04: \$90 \$115 W05: \$60 \$85 W06: \$85 W06: \$85 W07: \$80 a.m12:00 p.m. W06: \$60 \$85 W07: \$80 a.m12:00 p.m. W06: \$60 \$85 W07: \$80 a.m12:00 p.m. W07: \$72 \$97 W08: \$85 W07: \$80 a.m12:00 p.m. W07: \$72 \$97 W08: \$85 W07: \$80 a.m12:00 p.m. W07: \$72 \$97 W08: \$85 W07: \$80 a.m12:00 p.m. W07: \$72 \$97 W08: \$85 W07: \$80 a.m12:00 p.m. W08: \$85 \$110 W07: \$85					Mem.	Non-Mem.
STEP UP for Women	W01	· · · · · · · · · · · · · · · · · · ·				
Mode						\$95
PTRA: Quantum Cryptography: An Applied Way to Teach the Basics of Quantum Mechanics.	W02				\$60	•
Quantum Mechanics	W03		8:00 a.m.–12:00 p.m.	W03:	\$60	\$85
The Colliding Neutron Stars GW170817: A Nuclear Astrophysics Case study	W04					
for the Classroom			8:00 a.m.–12:00 p.m.	W04:	\$90	\$115
W06   Computational Modeling Using Glowscript in Introductory Physics   .8:00 a.m12:00 p.m.   W06: \$60   \$85   Intro to Modeling Instruction, a Research-Based Curriculum   .8:00 a.m12:00 p.m.   W07: \$72   \$97	W05					
Note   Nation   Nat				W05:	\$60	\$85
W08   Promoting STEM Engagement by Creating Pop-Culture Projects	W06		_	W06:	\$60	\$85
W09	W07	Intro to Modeling Instruction, a Research-Based Curriculum	8:00 a.m.–12:00 p.m.	W07:	\$72	\$97
MIO   LIGO & Interferometers	W08			W08:	\$85	\$110
W14   PICUP: Integrating Computation into Introductory Physics   1:00 p.m.—5:00 pm.   W14: \$60	W09	Fun and Engaging Labs	8:00 a.m.–12:00 p.m.	W09:	\$60	\$85
W15   Building the Living Physics Portal Community   1:00 p.m.—5:00 pm.   W15: \$60 \$85	W10	LIGO & Interferometers	8:00 a.m.–12:00 p.m.	W10:	\$100	\$125
NASA Materials Handling Certification	W14	PICUP: Integrating Computation into Introductory Physics	1:00 p.m.–5:00 pm.	W14:	\$60	\$85
Improv for Physics	W15	Building the Living Physics Portal Community	1:00 p.m5:00 pm.	W15:	\$60	\$85
Teaching Systems and Energy in Algebra-Based Physics   1:00 p.m5:00 pm.   W18: \$60 \$85	W16	NASA Materials Handling Certification	1:00 p.m5:00 pm.	W16:	\$60	\$85
Neutrino Masterclass	W17	Improv for Physics	1:00 p.m.–5:00 pm.	W17:	\$65	\$90
Neutrino Masterclass	W18	Teaching Systems and Energy in Algebra-Based Physics	1:00 p.m.–5:00 pm.	W18:	\$60	\$85
W21 Teaching Introductory Physics in an Earth & Space Science Context — Resources for Hands-on & Minds-on Activities	W19			W19:	\$62	\$87
W21 Teaching Introductory Physics in an Earth & Space Science Context — Resources for Hands-on & Minds-on Activities	W20				\$65	\$90
Workshops, Sunday, January 13   Time   Fees	W21					
Workshops, Sunday, January 13         Time         Fees           W23         PICUP: Integrating Computation into Upper-Level Physics         8:00 a.m12:00 p.m.         W23         \$60         \$85           W24         PTRA: It's HOT in Here         8:00 a.m12:00 p.m.         W24         \$110         \$135           W25         Enhancing your Class Using Academic Social Media         8:00 a.m12:00 p.m.         W25         \$60         \$85           W26         Improving Pedagogical Content Knowledge of Teaching Assistants and Instructors         8:00 a.m12:00 p.m.         W26         \$60         \$85           W27         Are You Testing What You Think You Are Testing? An Introduction to Factor Analysis         8:00 a.m12:00 p.m.         W27         \$60         \$85           W28         Intro to Using Robotic Telescopes in Student Research         8:00 a.m12:00 p.m.         W28         \$60         \$85           W29         A Suite of Research-Based Labs for E&M         8:00 a.m12:00 p.m.         W29         \$60         \$85           W30         Making Good Physics Videos         8:00 a.m12:00 p.m.         W30         \$60         \$85           W31         Space Center Field Trip         8:00 a.m12:00 p.m.         W31         \$95         \$120           W32         Integrating NGSS Practices with t			1:00 p.m.–5:00 pm.	W21:	\$60	\$85
PICUP: Integrating Computation into Upper-Level Physics						•
PTRA: It's HOT in Here	Wor	kshops, Sunday, January 13	Time		Fee	S
W25 Enhancing your Class Using Academic Social Media	W23	PICUP: Integrating Computation into Upper-Level Physics	8:00 a.m.–12:00 p.m.	W23	\$60	\$85
Improving Pedagogical Content Knowledge of Teaching Assistants and Instructors	W24	PTRA: It's HOT in Here	8:00 a.m12:00 p.m.	W24	\$110	\$135
Are You Testing What You Think You Are Testing? An Introduction to Factor Analysis8:00 a.m12:00 p.m. W27 \$60 \$85 W28 Intro to Using Robotic Telescopes in Student Research	W25	Enhancing your Class Using Academic Social Media	8:00 a.m12:00 p.m.	W25	\$60	\$85
W28 Intro to Using Robotic Telescopes in Student Research	W26	Improving Pedagogical Content Knowledge of Teaching Assistants and Instructors	8:00 a.m12:00 p.m.	W26	\$60	\$85
W29 A Suite of Research-Based Labs for E&M	W27	Are You Testing What You Think You Are Testing? An Introduction to Factor Analysis	8:00 a.m12:00 p.m.	W27	\$60	\$85
W29 A Suite of Research-Based Labs for E&M	W28	Intro to Using Robotic Telescopes in Student Research	8:00 a.m.–12:00 p.m.	W28	\$60	\$85
W30 Making Good Physics Videos	W29			W29	\$60	\$85
W31 Space Center Field Trip	W30				\$60	\$85
W32 Integrating NGSS Practices with the Physics Through Evidence—  Empowerment Through Reasoning Suite	W31	•	•			
Empowerment Through Reasoning Suite	W32					
W33 Fun, Engaging, Effective, Research-Validated Lab Activities and Demos for	-		8:00 a.m.–12:00 p.m.	W32	\$75	\$100
	W33				*	
	= ="		8:00 a.m.–12:00 p.m.	W33	\$75	\$100