

# Meeting Registration Form

## How to Register

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

### Please indicate your member society:

- GIREP       NSHP  
 NSBP       AACT

Please provide member number: \_\_\_\_\_

First Name \_\_\_\_\_

Last Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_

Country \_\_\_\_\_ Zip/Postal Code \_\_\_\_\_

Institution: \_\_\_\_\_

Email \_\_\_\_\_


Emergency Contact \_\_\_\_\_

Phone:  Home  Work (\_\_\_\_) \_\_\_\_\_

Fax  Home  Work (\_\_\_\_) \_\_\_\_\_

Type of school affiliation:

- High School    Two-Year College    Four-Year College    Other

 Disabilities/ Special Needs \_\_\_\_\_

### Please print clearly.

\_\_\_\_ Visa    \_\_\_\_ MasterCard    \_\_\_\_ Discover    \_\_\_\_ Am. Express

Account Number \_\_\_\_\_

Expiration Date \_\_\_\_\_

Security Code \_\_\_\_\_

Name on Card \_\_\_\_\_

Signature: \_\_\_\_\_

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 following fees will apply:

Cancellations by May 8, 2019 Midnight EST = \$75

Cancellations by June 26, 2019 = \$100

Cancellations from June 27 – July 11, 2019 = \$125

No Refunds after July 12, 2019

**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.**

## Registration Fees (circle one)

Registration Fees	Early Bird by 5/30/18	Advanced by 6/26/18	Onsite 6/27-8/1
AAPT Member – Full meeting	\$400	\$524	\$723
AAPT Member – Retired/Emer./Lifetime	\$305	\$465	\$637
Non-member – Full meeting	\$615	\$739	\$939
Under. /Grad. student AAPT members	\$50	\$60	\$80
AAPT Member – 1 Day (day? _____)	\$265	\$409	\$555
Non-member – 1 Day (day? _____)	\$490	\$624	\$770
High School Students	Complimentary		
Workshop Only	\$85		
Family/ Guest Registration:	<input type="checkbox"/> \$40 (Spouse/guest) <input type="checkbox"/> Kids 16 & under free		
NAME(S): _____			

**Members and Non-members, use Workshop Only below if attending Saturday or Sunday workshop without attending the Meeting**

Workshop Only (not attending meeting)    \$85 plus fee    \$ \_\_\_\_\_  
(fill out form on next page; write in fee)    \$ \_\_\_\_\_

## Commercial Workshops (free)

### Special Events (optional)

- 1. Spanish Fork Fiesta Days Rodeo event    # Persons \_\_\_\_\_ @ \$30    \$ \_\_\_\_\_  
Saturday, July 20, 7–10 p.m.
- 2. First Timers' Gathering    # Persons \_\_\_\_\_ (free)  
Monday, July 22, 7–8:30 a.m.
- 3. TYC Breakfast    # Persons \_\_\_\_\_ @ \$30    \$ \_\_\_\_\_  
Monday, July 22, 7–8:30 a.m.
- 4. Spouse/Guest Gathering    # Persons \_\_\_\_\_ (free)  
Monday, July 22, 9–10 a.m.
- 5. Early Career Professionals Speed Networking Event    # Persons \_\_\_\_\_ (free)  
Monday, July 22, 12–1:30 p.m.
- 6. Meet-up for Members and Supporters of LGBTQ Community    # Persons \_\_\_\_\_ (free)  
Monday, July 22, 12–1:30 p.m.
- 7. Retired Physicists Luncheon    # Persons \_\_\_\_\_ @ \$26    \$ \_\_\_\_\_  
Monday, July 22, 12–1:30 p.m.
- 8. K-12 Teachers Luncheon    # Persons \_\_\_\_\_ @ \$30    \$ \_\_\_\_\_  
Monday, July 22, 12–1:30 p.m.
- 9. Summer Picnic    # Persons \_\_\_\_\_ @ \$25    \$ \_\_\_\_\_  
Monday, July 22, 6–8 p.m.    Child picnic: \$15
- 10. Game Room Night    # Persons \_\_\_\_\_ (free)  
Monday, July 22, 9–12 p.m.
- 11. Einstein – Celebrating 100 Years show    # Persons \_\_\_\_\_ @ \$24    \$ \_\_\_\_\_  
Monday, July 22, 7–8:30 p.m.
- 12. AAPT Fun Run/Walk    # Persons \_\_\_\_\_ @ \$35    \$ \_\_\_\_\_  
Tuesday, July 23, 6–8 a.m.
- 13. Monday AM Raffle (Fire TV Stick 4K)    #\_ @ \$3 ea.    \$ \_\_\_\_\_
- 14. Monday PM Raffle (Celestron telescope)    #\_ @ \$3 ea.    \$ \_\_\_\_\_
- 15. Tuesday AM Raffle (Fire HD 8 Tablet)    #\_ @ \$3 ea.    \$ \_\_\_\_\_
- 16. Tuesday PM Raffle (Celestron telescope)    #\_ @ \$3 ea.    \$ \_\_\_\_\_
- 17. PER Conference & Reception    # Persons \_\_\_\_\_ @ \$155    \$ \_\_\_\_\_  
Wednesday, July 24  
Students: \$100
- 18. PER Poster Session & Reception Only    # Persons \_\_\_\_\_ @ \$30    \$ \_\_\_\_\_  
Wednesday, July 24, 8–10 p.m.
- 19. Diversity T-Shirt    # \_\_\_\_\_ @ \$22    \$ \_\_\_\_\_

Registration Fee \_\_\_\_\_ \$ \_\_\_\_\_  
Workshop Fee(s) \_\_\_\_\_ \$ \_\_\_\_\_  
Special Events Fee(s) \_\_\_\_\_ \$ \_\_\_\_\_  
\$10 Administration Fee \_\_\_\_\_ \$ 10  
**TOTAL:** \_\_\_\_\_ \$ \_\_\_\_\_

**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 12, 2019 will be accepted in the Executive Office for processing. Workshop abstracts can be found online at [www.aapt.org/Conferences/sm2019/workshops.cfm](http://www.aapt.org/Conferences/sm2019/workshops.cfm).

**NAME** \_\_\_\_\_

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

All workshops will be held at BYU (Saturday) and Utah Valley University (Sunday)

Workshops, Saturday, July 20		Time	Fees			
			Mem.	Non-Mem.		
W01	Learn Physics While Practicing Science: Introduction to ISLE .....	8:00 a.m.–5:00 p.m.	W01:	\$87	\$112	_____
W02	Physics Activities for the Life Sciences (PALS).....	8:00 a.m.–5:00 p.m.	W02:	\$85	\$110	_____
W03	Developing and Implementing NGSS 3-D Physics Lessons .....	8:00 a.m.–5:00 p.m.	W03:	\$85	\$110	_____
W04	High Altitude Ballooning .....	8:00 a.m.–5:00 p.m.	W04:	\$120	\$145	_____
W05	Visualizing Contemporary Physics .....	8:00 a.m.–5:00 p.m.	W05:	\$105	\$130	_____
W06	Quantum Mechanics with Mathematica.....	8:00 a.m.–12:00 p.m.	W06:	\$60	\$85	_____
W07	Get the Facts Out: Changing the Conversation Around Teaching as a Profession.....	8:00 a.m.–12:00 p.m.	W07:	\$60	\$85	_____
W08	Fun and Engaging Labs.....	8:00 a.m.–12:00 p.m.	W08:	\$60	\$85	_____
W09	PIRA Lecture Demonstrations I & II Condensed: Selections from the PIRA 200 .....	8:00 a.m.–12:00 p.m.	W09:	\$95	\$120	_____
W10	Mobilizing the Forgotten Army: Equipping TAs with Inquiry-based Instruction Methods .....	8:00 a.m.–12:00 p.m.	W10:	\$80	\$105	_____
W11	Introductory Labs for Optical and Wave Physics.....	8:00 a.m.–12:00 p.m.	W11:	\$72	\$97	_____
W12	Understanding the Mathematical Constructs that Boggle New Physics Students.....	8:00 a.m.–12:00 p.m.	W12:	\$70	\$95	_____
W13	Graph Out Loud .....	1:00 p.m.–5:00 p.m.	W13:	\$60	\$85	_____
W14	Using Universal Design for Learning to Prepare for Variation in Physics Learners’ Needs, Abilities and Interests.....	1:00 p.m.–5:00 p.m.	W14:	\$63	\$87	_____
W15	PICUP: Integrating Computation into Introductory Physics .....	1:00 p.m.–5:00 p.m.	W15:	\$60	\$85	_____
W16	LIGO & Interferometers.....	1:00 p.m.–5:00 p.m.	W16:	\$100	\$125	_____
W17	Using Astronomy Demonstration Videos.....	1:00 p.m.–5:00 p.m.	W17:	\$30	\$43	_____
W18	Getting Your Paper Published.....	1:00 p.m.–5:00 p.m.	W18:	\$60	\$85	_____
W19	Breaking Glass with Sound Waves (Make & Take).....	1:00 p.m.–5:00 p.m.	W19:	\$80	\$105	_____
W20	Machine Learning in PER.....	1:00 p.m.–5:00 p.m.	W20:	\$135	\$160	_____
W21	Use of 3D Pens in HS Labs and Community .....	1:00 p.m.–5:00 p.m.	W21:	\$65	\$90	_____

Workshops, Sunday, July 21		Time	Fees			
			Mem.	Non-Mem.		
W22	Teaching Innovation and Entrepreneurship in Physics: Helping Physics Students Change the World.....	8:00 a.m.–5:00 p.m.	W22:	\$85	\$110	_____
W23	An Introduction to Data Science for Emerging Quantitative Researchers with R-Studio ..	8:00 a.m.–12:00 p.m.	W23:	\$60	\$85	_____
W24	Designing Economical Outreach Kits for Physics.....	8:00 a.m.–12:00 p.m.	W24:	\$80	\$105	_____
W25	Creating Sustainable Change in University Departments: Theory and Practice .....	8:00 a.m.–12:00 p.m.	W25:	\$62	\$87	_____
W26	Fun, Engaging, Effective, Research-Validated Lab Activities and Demos for Introductory University, College and High School Physics.....	8:00 a.m.–12:00 p.m.	W26:	\$75	\$100	_____
W27	Just-in-time Teaching .....	8:00 a.m.–12:00 p.m.	W27:	\$30	\$43	_____
W28	Demo Kit in a Box: Sound and Waves.....	8:00 a.m.–12:00 p.m.	W28:	\$95	\$120	_____
W29	A Primer on Computing with Python .....	8:00 a.m.–12:00 p.m.	W29:	\$60	\$85	_____
W30	Fostering Inclusivity in Physics: Resources, Strategies, and Interventions .....	8:00 a.m.–12:00 p.m.	W30:	\$60	\$85	_____
W31	PTRA: Cartoon Physics .....	8:00 a.m.–12:00 p.m.	W31:	\$70	\$95	_____
W32	Designing and Building Informal Programs .....	8:00 a.m.–12:00 p.m.	W32:	\$65	\$90	_____
W33	PICUP: Integrating Computation into Upper-Level Physics .....	8:00 a.m.–12:00 p.m.	W33:	\$60	\$90	_____
W34	Coding Integration in High School Physics and Physical Science.....	8:00 a.m.–12:00 p.m.	W34:	\$30	\$43	_____
W35	Group-Worthy Tasks.....	8:00 a.m.–12:00 p.m.	W35:	\$60	\$85	_____
W36	New Resources for AP Physics .....	8:00 a.m.–12:00 p.m.	W36:	\$60	\$85	_____
W37	Improving the Pedagogical Content Knowledge of Teaching Assistants and Instructors ...	1:00 p.m.–5:00 p.m.	W37:	\$60	\$85	_____
W38	Getting Students to Think Critically In Intro Labs .....	1:00 p.m.–5:00 p.m.	W38:	\$60	\$85	_____
W39	Developing the Next Generation of Physics Assessments.....	1:00 p.m.–5:00 p.m.	W39:	\$60	\$85	_____
W40	Adapting Research-based Materials for Teaching Quantum Mechanics at Your Institution ..	1:00 p.m.–5:00 p.m.	W40:	\$60	\$85	_____
W41	Teaching Introductory Physics in an Earth & Space Science Context .....	1:00 p.m.–5:00 p.m.	W41:	\$60	\$85	_____
W42	Activity-based Physics and NGSS .....	1:00 p.m.–5:00 p.m.	W42:	\$80	\$105	_____
W43	Teaching Physics towards Social Justice .....	1:00 p.m.–5:00 p.m.	W43:	\$65	\$90	_____
W44	Intermediate and Advanced Labs .....	1:00 p.m.–5:00 p.m.	W44:	\$85	\$110	_____
W45	Modifying Introductory Labs to Target Scientific Reasoning, Decision-Making Abilities.	1:00 p.m.–5:00 p.m.	W45:	\$60	\$85	_____
W46	Astronomy Research Seminar Workshop.....	1:00 p.m.–5:00 p.m.	W46:	\$60	\$85	_____
W47	Teaching About Work and Energy .....	1:00 p.m.–5:00 p.m.	W47:	\$60	\$85	_____
W48	Curriculum Swap: Creating, Sharing, and Improving Student-centered Physics Activities for Life Science Students.....	1:00 p.m.–5:00 p.m.	W48:	\$60	\$85	_____
W49	STEP UP 4 Women – Take Action to Engage Women in Physics.....	1:00 p.m.–5:00 p.m.	W49:	\$60	\$85	_____
W50	Field Tested Systems; Intro to Spectroscopy .....	1:00 p.m.–5:00 p.m.	W50:	\$60	\$85	_____