

WINTER MEETING January 12-15 Houston, TX

Consciously Overcoming Unconscious Bias in the Workplace –

10:30-12:30

4-5:30

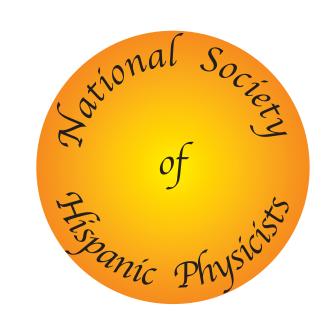
4-5:30

4-5:30

9–11:59

11-12:30 DI

Game Night



Friday, January 11, 2019

| 8 a.m.–11 p.m. | Quiet Room | River Oaks |
|----------------|----------------------------|---------------|
| 8 a.m.–11 p.m. | Lactation Room | Focus |
| 4–5 p.m. | Finance Committee | Monarch |
| 4–7 p.m. | REGISTRATION | Woodway Foyer |
| 5–6 p.m. | AAPT New Board Orientation | Monarch |
| 6:30-9:30 p.m. | AAPT Board of Directors I | Monarch |

Saturday, January 12, 2019

| | -11 p.m. | Quiet Room | River Oaks |
|--------|----------|---|-------------------|
| | • | Lactation Room | Focus |
| | -4 p.m. | REGISTRATION | Woodway Foyer |
| 8–9:30 | | Publications Committee | Chevy Chase |
| 8–9:30 | | Meetings Committee | West Alabama |
| | | WORKSHOPS ARE AT UNIVERSITY OF HOUSTON | |
| 8–12 | W01 | Learn to Create Interactive Physics Simulations for | , |
| | | Tablets, and Computers in Just 4 Hours | Fleming 231 |
| 8–12 | W02 | STEP UP 4 Women | Farish 213 |
| 8–12 | W03 | Introduction to LaTeX for Teachers and Students | Fleming 235 |
| 8–12 | W04 | PTRA: Quantum Cryptography: An Applied Way to Te | each the |
| | | Basics of Quantum Mechanics | Farish 215 |
| 8–12 | W05 | The Colliding Neutron Stars GW170817: A Nuclear | Astrophysics |
| | | Case Study for the Classroom | Farish 217 |
| 8–12 | W06 | Computational Modeling Using Glowscript in | |
| | | Introductory Physics | Farish 218 |
| 8–12 | W07 | Intro to Modeling Instruction, a Research-Based Cu | rriculum |
| | | | Farish 219 |
| 8–12 | W08 | Promoting STEM Engagement by Creating Pop- | |
| | | Culture Projects | Fleming 233 |
| 8–12 | W09 | Fun and Engaging Labs | Fleming 239 |
| 8–12 | W10 | LIGO & Interferometers | Fleming 232 |
| 10:15– | 4:45 | AAPT Board of Directors II | Monarch |
| 11:30- | 2:30 | Resource Letters Committee | West Alabama |
| 1–3 | | Field Trip to MD Anderson Cancer Center | Offsite |
| 1–5 | W14 | PICUP: Integrating Computation into Introductory Ph | nysics Farish 213 |
| 1–5 | W15 | Building the Living Physics Portal Community | Fleming 235 |
| 1–5 | W18 | Teaching Systems and Energy in Algebra-based Ph | ysics Farish 215 |
| 1–5 | W19 | Neutrino Masterclass | Fleming 231 |
| 1–5 | W20 | Deep Learning with Python | Fleming 232 |
| 1–5 | W21 | Teaching Introductory Physics in an Earth & Space | Science Context |
| | | Resources for Hands-on & Minds-on Activities | Fleming 233 |
| 2:30-4 | :30 | Nominating Committee | Chevy Chase |
| 4–6 | | Identifying and Responding to Racial Microaggress | ions at |
| | | (K-16) School | West Alabama |
| 5:30-6 | :30 | New Chairs Orientation | San Felipe |
| 5:30-6 | :30 | Section Representatives and Officers | Tanglewood |
| 5:30-7 | | ALPhA Open Meeting | Westchester |
| 5:30-7 | | | Grill Restaurant |
| 6:30-7 | | | Grill Restaurant |
| 6:30-8 | | Programs and Planning I | San Felipe |
| 7:30–9 | | REGISTRATION | Woodway Foyer |
| 8–10 | | Exhibit Hall Open and Welcome Reception | Woodway I & II |
| 8–10 | | SPS Undergraduate Research and Outreach Posters | - |
| 0 10 | | or o originaliate resolution and outroder rosters | v v o o u v u y i |

Sunday, January 13, 2019

| 6 a.m.–11 p.m. | Quiet Room | River Oaks | |
|--|---|----------------------------------|--|
| 6 a.m11 p.m. | Lactation Room | Focus | |
| 7 a.m.–4 p.m. | REGISTRATION | Woodway Foyer | |
| 7–8:30 | First Timers' Gathering | Monarch | |
| 7:30–9 | Review Board | Chevy Chase | |
| 8–9 | Physics Bowl Advisory Committee | Bellaire | |
| 8–9 | SPS Advisor Meet and Greet W | hite Oak Restaurant | |
| 8–10 | Identifying and Addressing Subtle Biases in the | | |
| | Workplace: Microaggressions | West Alabama | |
| 8–12 W23 | PICUP: Integrating Computation into Upper-Leve | Phys. Fleming 231 | |
| 8–12 W26 | Pedagogical Content Knowledge of Teaching Ass | sistants Fleming 233 | |
| 8–12 W27 | Are You Testing What You Think You Are Testing? | | |
| | Factor Analysis | Farish 213 | |
| 8–12 W28 | Intro to Using Robotic Telescopes in Student Res | | |
| 8–12 W29 | A Suite of Research-based Labs for E&M | Fleming 239 | |
| 8–12 W30 | Making Good Physics Videos | Fleming 232 | |
| 8–12 W31 | Space Center Field Trip | Offsite | |
| 8–12 W32 | Integrating NGSS Practices with the Physics Thi | | |
| | Empowerment Through Reasoning Suite | Farish 217 | |
| 8–12 W33 | Fun, Engaging, Effective, Research-Validated Lal | | |
| | Demos for Introductory University, College & Hig | | |
| 0.00.10 | History Calcast Observe a these | Fleming 236 | |
| 8:30–10 | High School Share-a-thon | Plaza II | |
| 9–10 | Venture/Bauder Fund Committees | Grand Ballroom III | |
| 9–10 | Governance Structure (COGS) Committee | Chevy Chase | |
| 9–10 | Executive Programs Committee | Post Oak 1 Woodway III | |
| | -10:30 K12 Physics Teachers Lounge DigiKit Exploration | | |
| 10–10:30 K12 Physics Teachers Lounge PTRA Info | | Woodway III | |
| 10–1 | 3 | S – Consulate Room | |
| 10-5 | Exhibit Hall Open (Sunday) Marning Proof in Exhibit Hall | Woodway I & II | |
| 10–10:30 10:15 | Morning Break in Exhibit Hall Morning Raffle in Exhibit Hall – Echo Spot | Woodway I & II Woodway I & II | |
| 10:30–11:30 | K12 Physics Teachers Lounge DigiKit Analog to I | • | |
| 10:30-11:30 | | aily Grill Restaurant | |
| 10.30-11.30 | סףטעספ מווע טעפטנ טמנוופוווון טיי | any unii nestaurant | |

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|----------------|--|----|
| | Part I (Individual Strategies) West Alabama | |
| | O1 Expert TA: Learning Resources beyond Online Homework Plaza I | 12 |
| | O2 Perimeter Institute: Evidence for Climate Chang Chevy Chase | 12 |
| 11:30–12:30 CW | O3 What's New from PASCO Scientific? Woodway III | 12 |
| 11:30–12:30 | K12 Physics Teachers Lounge DigiKit Photoelectric Woodway III | 12 |
| 12:30–1:30 | 2018 Andrew Gemant Award – David Kaplan | 12 |
| | (Particle Fever: A Temporary Bout of Insanity) Galleria I | 12 |
| 12:30–2 | K-12 Luncheon Monarch | 12 |
| | Perimeter Institute: Wave Model Applications Chevy Chase | 12 |
| 1:30–2:30 CW05 | The PASCO Wireless Smart Cart – Game Changer for the | 12 |
| | Physics Lab Woodway III | 12 |
| 1:30–3:30 BA | Approaches to Recruiting Women in Physics Plaza I | 12 |
| 1:30–3:20 BB | Frontiers Session: Living and Working in the Space Beyond Earth | 1- |
| | Plaza II | 2- |
| 1:30–2:50 BC | Introducing Computation into Introductory Physics Classes Bellaire | 2- |
| 1:30–3:30 BD | K-12 Ideas from PTRA, PIRA, AIPHA Galleria III | 3- |
| 1:30–3:30 BE | PER in Latin America and at Hispanic-Serving Institutions | 3: |
| | in the U.S. San Felipe | 3- |
| 1:30–3:30 BF | Physics Outreach for Underserved Populations Westchester | 3: |
| 1:30–3:10 BG | Recruiting Physics Teachers: Research and Best Practices Sage | 3: |
| 1:30–3:30 BH | The New Advanced Laboratory Tanglewood | 3: |
| 1:30-3:20 BI | Physics Majors: High School to Doctorate Post Oak | 3: |
| 2–3 | SPS Undergraduate Meet and Greet Westin Oaks – Embassy Room | |
| 2:30–3:30 | K12 Physics Teachers Lounge STEP UP 4 Women Woodway III | 3: |
| 3–4 CW06 | PASCO – Untangling Basic Circuits Woodway III | 3: |
| 3:30–4 | Afternoon Break in Exhibit Hall Woodway I & II | 3: |
| 3:40 | Afternoon Raffle in Exhibit Hall – Celestron Telescope Woodway I & I | |
| 4–5:30 | Diversity in Physics Committee Westin Oaks – Consulate Room | 3: |
| 4–5:30 | Apparatus Committee Monarch | |
| 4–5:30 | International Physics Educ. Committee Westin Oaks – Continental | |
| 4–5:30 | Professional Concerns Committee Westin Oaks – Embassy Room | 3: |
| 4–5:30 | Physics in Pre-High School Education Committee Chevy Chase | |
| | | |

| | | | (Bark Watter: The Wort Frontier) | croity of floddto |
|---|-----------|----|---|-------------------|
| | 5–6 | | K12 Physics Teachers Lounge Open | Woodway II |
| | 5:30-6:30 | CA | Innovations in Teaching Analytical Mechanics | Plaza |
| | 5:30-6:30 | CB | Interactive Lecture Demonstrations: What's New? | |
| 1 | | | ILDs Using Clickers and Video Analysis | Plaza |
| | 5:30-6:30 | CC | Physics at Hispanic Serving Institutions (HSIs): Chal | llenges and |
| | | | Opportunities | Bellair |
| | 5:30-7 | CD | Science Cafe/Nerd Night: Scientists Engage the Pul | olic San Felip |
| | 5:30-6:30 | CE | Teaching with Data: Multi-messenger Astronomy | Galleria II |
| | 5:30-7 | CF | UTeach at 20 Years | Westcheste |
| | 5:30-6:30 | CG | PER: Student & Instructor Support & Professional D | evelopment Sag |
| | 5:30-6:30 | CH | Teacher Training/Enhancement | Tanglewoo |
| | 5:30-6:10 | CI | Pre High School | Post Oa |
| | 7-8:30 | | Laboratories Committee | West Alabam |
| | 7-8:30 | | History and Philosophy of Physics Committee | Monarc |
| | 7-8:30 | | Physics in High Schools Committee | Sag |
| | 7-8:30 | | Research in Physics Education Committee | Tanglewood |
| | 7–8:30 | | Graduate Education in Physics Committee | Plaza |
| | 7–8:30 | | Science Education for the Public Committee | Chevy Chas |
| | 7–8:30 | | Physics in Two-Year Colleges Committee | Post Oal |
| | 7–8:30 | | Early Career Speed Networking Westin Oaks – | Consort Ballroor |
| | 8:30–10 | | Meeting of the Members | Galleria |
| | | | | |

Interests of Senior Physicists Committee

(Dark Matter: The Next Frontier)

Physics in Undergraduate Education Committee

2018 Andrew Gemant Award – David Kaplan

West Alabama

University of Houston

Westin Oaks - The Roof

San Felipe

Galleria II

7-8:30

7–8

7-8:30

7:30-8:30

8 a.m.-3 p.m.

Monday, January 14, 2019

| 6 a.m.–11 | • | Quiet Room | River Oaks Focus |
|----------------|--------|--|---------------------|
| 6 a.m.–11 p.m. | | | |
| 7 a.m.–5 p |).[[]. | | Voodway Foyer |
| 7–8 | | Morning Mall Walk meet in front of Daily (| |
| 7:30–9 | | Membership and Benefits Committee | Galleria II |
| 7:30–9 | | Investment Advisory Committee | TBD |
| 7:30–9 | | PTRA Advisory Committee | Bellaire |
| 7:30–9:30 | | Consciously Overcoming Unconscious Bias in the Wor | • |
| | | Part II (Institutional Strategies) | West Alabama |
| 8–9 | | K12 Physics Teachers Lounge Open | Woodway III |
| | PST1 | | Woodway I & II |
| 9:30–10:3 | 0 | PLENARY: Michelle Feynman (Growing Up Feynman) | |
| 10–4 | | • | Woodway I & II |
| 10:30–11 | | · · | Woodway I & II |
| 10:30–11 | | Book Signing, Michelle Feynman | AAPT Booth |
| 10:45 | | Exhibit Hall Raffle – Sports Action Camera | Voodway I & II |
| 11–12 | | Outreach – Effective Practices for Undergrads | |
| | | Westin Oa | ks – Consulate |
| 11-12 C | W07 | Introducing Pivot Interactives from Vernier | Woodway III |
| 11-12 C | 80W | Perimeter Institute: What's New in Physics | Chevy Chase |
| 11–12 | | K12 Physics Teachers Lounge Get the Facts Out | Woodway III |
| 11-12:30 | T0P01 | Graduate Student Topical Discussion | Galleria II |
| 11-12:20 | DA | 100 Years of Experimental Relativity | Plaza II |
| 11-12:30 | DB | 30 Demos in 60 Minutes | Galleria III |
| 11-12:20 | DC | Drones and VR: Examples of Emerging Educational Te | chnologies |
| | | Across the World | Westchester |
| 11–11:20 | DD | My Favorite Demo that Works – How & Why? | Sage |
| 11–12 | DE | Ordering of Topics | Tanglewood |
| 11–12:20 | DF | PhysTEC in 50 States | Bellaire |
| 11–12 | DG | PER: Student Content Understanding, Problem-Solvin | g and |
| | | Reasoning | Plaza I |
| 11–12 | DH | Making Out-of-School STEM Welcoming Across Lang | uages Post Oak |

| 12–1 | Implementing the Career Toolbox and Improving Dep | |
|--------------|---|-------------------|
| 10 1 CW00 | Westin Oaks – Co | |
| 12–1 CW09 | Vernier Solutions for Physics and Chromebooks | Woodway III |
| 12–1 CW10 | Perimeter Institute: Visualizing Energy | Chevy Chase |
| 12:30–2 | Educational Technologies Committee | West Alabama |
| 12:30–2 | Contemporary Physics Committee | Tanglewood |
| 12:30–2 | Space Science and Astronomy Committee | Plaza I |
| 12:30–2 | Women in Physics Committee | San Felipe |
| 12:30–2 | Teacher Preparation Committee | Sage |
| 12:30–2 | PIRA Committee | Post Oak |
| 12:30–2 | | Grill Restaurant |
| 12:30–2 | , | i Peli Restaurant |
| 12:30–2 | | i Peli Restaurant |
| 1–2 | K12 Physics Teachers Lounge DigiKits Terminal Velo | - |
| 2–3 | K12 Physics Teachers Lounge DigiKits Nerve Science | e Woodway III |
| 2–3 | Meetup with LGBTQ Community Westin | Oaks – The Roof |
| 3–3:30 | Exhibit Hall Afternoon Break | Woodway I & II |
| 3:15 | Exhibit Hall Raffle – Drone, with Camera | Woodway I & II |
| 3–4 | K12 Physics Teachers Lounge DigiKits | Woodway III |
| 3:30–4 | Great Book Give-away | Woodway I & II |
| 3:30-5:30 EA | First Billion Years of a Solar System | Tanglewood |
| 3:30-5:30 EB | Assessing the Effectiveness of Laboratory Curricula | Bellaire |
| 3:30-5:30 EC | Assessment Practices in Introductory Courses | |
| | for the Life Sciences | Westchester |
| 3:30-5:30 ED | Astronomy Education Research | Plaza I |
| 3:30-5:30 EE | Best Practices in Educational Technology | Plaza II |
| 3:30-5:30 EF | John Hubisz: Celebrating 59 Years of AAPT Distingui | shed |
| | Service | San Felipe |
| 3:30-5:30 EG | PTRA: A Holistic Approach to Physics Instruction: Int | egrating |
| | Common Core Math Standards, Common Core ELA | and NGSS |
| | | Galleria III |
| 3:30–5 EH | The Impact of Policy and/or Regulations on Access t | 0 |
| | Higher Education in STEM Fields | Sage |
| 3:30-5:20 El | Science and Society | Post Oak |
| 4–5 | K12 Physics Teachers Lounge Open | Woodway III |
| 5:30-6:30 | PLENARY: Kip Thorne (Nobel Prize 2017, LIGO and 0 | Gravitational |
| | Waves) | Galleria I |
| 6:30-8 | SPS Undergraduate Awards Reception | Monarch |
| 6:30-8:30 FB | Gender Considerations in the Laboratory | Plaza I |
| 6:30-8:30 FC | Hands-on Outreach | San Felipe |
| 6:30-8:30 FD | Integration of Computation into the Curriculum on | |
| | the Departmental Scale | Galleria III |
| 6:30-8:30 FE | PER and Student Motivation: Beyond Single Course | Content Sage |
| 6:30-8:30 FF | Results from the First Safe Space for People of Colo | |
| | in PERC | Westchester |
| 6:30-8:30 FG | Space Science in Introductory Courses | Bellaire |
| 6:30-8:10 FH | High School | Plaza II |
| 6:30–8:10 FI | Introductory Labs/Apparatus | Post Oak |
| 7–8:30 | PERLOC | West Alabama |
| 7.000 | A 1 0 '11 | |

Tuesday, January 15, 2019

Chevy Chase

River Oaks

Chevy Chase

Woodway Foyer

Galleria I

Monarch

meet in front of Daily Grill Restaurant

Focus

Woodway I & II

Awards Committee

Morning Mall Walk

REGISTRATION

Board of Directors II

Programs and Planning II

PERTG Town Hall Meeting

8:30–10 PST2 Poster Session 2

6 a.m.-11 p.m. Quiet Room

6 a.m.-11 p.m. Lactation Room

| 8:30–10 GA | Early Career Teacher Experiences – Voices from th | e Field San Felipe |
|---------------|---|--------------------|
| 8:30–10 GB | Effective Departmental Self Study and External | |
| | Evaluation | Westchester |
| 8:30–10 GD | Physics Teacher Preparation in Different Countries | |
| | throughout the World | Plaza I |
| 8:30-9:30 GE | Success Stories of Female Physicists | Tanglewood |
| 8:30–10 GF | Successful Online Astronomy Labs | Galleria III |
| 8:30-9:40 GG | Introductory Courses | Sage |
| 8:30–10:30 GI | The Wonderful World of AJP | Post Oak |
| 9–12 SEE | S – Students Exploring Engineering and Science | |
| | Westin Oaks – C | Consort Ballroom |
| 10-10:30 | Morning Break on Your Own | |
| 10:30-12:30 | AWARDS: DSCs, Melba Newell Phillips Medal, Oe | rsted Medal, |
| | AAPT Presidential Transfer, AIP Science Writing | Galleria I |
| 12:30-2:20 HA | A Day at a School, K-12 | Tanglewood |
| 12:30-2:20 HB | Implementing Research-based Instructional Strate | gies Post Oak |
| 12:30-2:20 HC | Integrating Computation Into Laboratories at All Le | vels Sage |
| 12:30-2:30 HD | Professional Skills for Graduate Students | San Felipe |
| 12:30–2 HE | The Living Physics Course: New Ideas, Old Tricks | Galleria III |
| 12:30-2:30 HF | The Physics of Extreme Mineral Exploration | Westchester |
| 12:30-2:10 HG | Upper Division and Graduate | Bellaire |
| 12:30-1:20 HH | PER: Diversity, Equity & Inclusion | Plaza I |
| 12:30-1:30 HI | PER: Assessment, Grading and Feedback | Plaza II |
| 12:30-1:30 | Panel: Communicating Science | West Alabama |
| 2:30-3 | Paper Sort Meeting for Provo | Chevy Chase |
| 2:30-3:30 | Nominating Committee II | West Alabama |
| 2:30-4 | Post Deadline Posters | Woodway I & II |
| 3–4:40 IA | Post Deadline Abstracts I | Post Oak |
| 3-4·30 IB | Post Deadline Abstracts II | Sage |

PLEASE NOTE:

Most events will be held in the Westin Galleria Hotel – Some will be at the Westin Oaks Hotel.





Goals and Assessment for Computational Work in Physics