

Session Tracks

Committee on Apparatus

Exciting Demos & Equip in E&M
PIRA Session - 3D Printing in Labs and Demonstrations

Committee on Diversity in Physics

Coping Mechanisms for Physics Students from Underrepresented Groups
Supporting Equity through Group Work and Collaboration

Committee on Educational Technologies

Best Practices in Educational Technology
Cultural Perspectives on Educational Technology
Developing and Using Next-Generation Simulations
Educational Applications of Drones, Augmented/Virtual Reality, and Other Emerging Technologies
Effective Practices for Integrating Computation in Undergraduate Physics
Effective Practices in Educational Technology
Use of Online Presence to Enhance Instruction

Committee on Graduate Education in Physics

Multiple Career Paths in PER

Committee on History and Philosophy in Physics

History and Philosophy in Physics Courses
Science and Religion

Committee on the Interests of Senior Physicists

conFUSION about Units: Mass/Weight, Weightlessness and Others
Defining Units: Old and New

Committee on International Physics Education

Citizen Science and International Collaboration
Creating Inclusive Diverse Classrooms

Committee on Laboratories

Designing Labs with Low-Cost Embedded Computers: Raspberry PI, BeagleBone, and Galileo
Lab Recommendations Focus Area 5: Technical and Practical Skills
Optics Labs at All Levels: Rainbows to Raman Spectroscopy

Committee on Modern Physics

Neutrino Physics Investigations for Students and Teachers

Committee on Physics in High Schools

Designing Curriculum for Social Justice in the HS Physics Classroom
K-12 PER
Modeling Instruction at All Levels
NGSS Evidence Statements
Teaching AP Physics with Big Ideas, Writing, & Calculations
Writing in HS Physics Classes

Committee on Physics in Pre-High School Education

Constructing Learning Cycles Using the Evidence Statements of the NGSS
Electricity, Energy, and Particles: Squishy Circuits, Scribble Bots, and the Particle Zoo
Make, Play, Learn
Opportunities for K-12 Teacher Leadership and Engagement

Committee on Physics in Two-Year Colleges

Adjunct Faculty
Current Space/Astronomy/Physics News Used in the Classroom
Going Public: How to Get Published
Highlights of TYC New Faculty Experience
Impact and Reflections on the 20+ years of TYC Physics Workshop Projects

Committee on Physics in Undergraduate Education

Jupyter: VPython/GlowScript
Learning Outcomes and Assessment in the IPLS Course
New Developments in Introductory Physics for Life Science Dissemination
PER Innovations for Reducing DFW Rates and Improving Retention in Introductory Physics Sequences
PER-Based Innovations in Upper Division Physics Classes
Phys21
Results of a Comprehensive National Survey of the Uses of Computation in Undergraduate Physics Programs
The Art and Science of Teaching

Committee on Professional Concerns

Panel on First Year Teacher Concerns
Panel on Public Affairs - Physics Teacher Recruitment
Physicists with Disabilities
Survival Skills for New High School Teachers

Committee on Research in Physics Education

Engineering Education
Graduate Student Topical Discussion
Interactive Lecture Demonstrations: What's New? ILDs Using Clickers and Video Analysis
Professional Skills for Graduate Students
Race and Gender Performance Gaps: Problems and Alternatives
Research on the Impacts of the Learning Assistant Model
Solo PER
The Physics of the NSF IUSE Program
The Use of IOLab for Introductory Laboratory Reform

Committee on Science Education for the Public

Climate Change

Committee on Space Science and Astronomy

Avenues for Publishing in Astronomy Education
Frontiers in Astronomy
Improving Student Learning With the Use of Popular Media
Multi-Messenger Astronomy in the Age of GR and Gravitational Waves
Preparing the Community for the August 21st Solar Eclipse

Committee on Teacher Preparation

30 Demos in 60 Minutes
Innovative Models of Physics Teacher Preparation

Research on Physics Teacher Preparation

Committee on Women in Physics

Developing Successful Mentoring Relationships

Making Change through Science Policy