

Call for Presentations

Below is a list of topics specific to SM26 that members have proposed to see at the conference. If you think your presentation fits into one of these categories, please indicate that in your submission. Otherwise, please use one of the more general Presentation topics below.

25 years of the Physics Teacher Education Coalition (PhysTEC)

In 2001, leaders in teacher preparation created PhysTEC to address the need for more physics teachers. Now 350 PhysTEC Member institutions, organizations and individuals comprise a national network of institutions in 52 states and territories committed to develop and promote excellence in physical science teacher preparation. This anniversary session explores PhysTEC's incredible impact, groundbreaking research results and essential resources. All past and current PhysTEC community members are encouraged to submit a talk. We celebrate years and look forward to the future of physics teacher preparation. PhysTEC is managed with an APS-AAPT partnership. This material is based upon work supported by the NSF Grant # 2325980.

Action Research in the K-12 Physics Classroom

In this practitioner-focused session, speakers will share how they incorporate action research into their K-12 physics classrooms.

Alternative Assessment

This session will explore alternative approaches to assessment that may include but is not limited to portfolio assessment, standards-based grading, specifications grading, contract-grading and/or ungrading.

Contemporary Physics and Astronomy in the Classroom

Share your successes incorporating current research into the undergraduate curriculum! Help others inspire their students with your experience! Either with single lectures on current topics in traditional classes or with the development of special topics classes, tell us what you did, what students learned, and how it went.

Cool Stuff You've Done with LLM's

Interesting things that you have done using Large Learning Machines in or with your class.

Cosmic Ray Research from the Classroom into Space

Share your use of cosmic ray projects from high school classrooms to post graduate.

Developing Scientific Reasoning and Decision-Making Abilities

Various curricula and methodologies, which have been implemented in different educational settings such as lecture and group-based projects, have been shown to promote higher order skills involved in scientific reasoning and decision-making. This session focuses on effective practices in the development and assessment of students' scientific reasoning and decision-making skills, as well as dissemination of related curriculum and teaching practices to promote these skills.

Ed Tech and Accessibility

Educational Technology and accessibility issues in physics education

Innovations in Teaching Astronomy

New approaches in teaching astronomy and research results in astronomy education.

PICUP: Integrating Computation into Your Curriculum

Have you integrated computational activities into one or more Physics courses? Come share your work and learn from others! You can present on curricular materials you developed, materials you modified for use in your course, or a description of how you integrated materials developed by others. How did the course go? What did the students learn that they would not have learned without computation? What advice do you have for other instructors wanting to integrate computational activities in their Physics courses?

Using and Contributing to the Living Physics Portal

This session is one of a continuing series of talks by the Physics for Life Sciences (PLS) community focusing on highlighting the curricula and resources of the Living Physics Portal (LPP), an online archive of innovative pedagogical resources and curricula. Speakers have frequently focused on newly developed materials for the PLS course, challenges and opportunities of contributing to the LPP, and of working within the community of IF curricula developers.

Weaving History & Philosophy into Physics Education

This contributed session explores the integration of the history and philosophy of science into physics courses. We are interested in presentations that share concrete examples of how you've used historical controversies or philosophical debates to: (1) Enhance student understanding of key physics concepts; (2) Design engaging discussion prompts or assignments; (3) Structure unique classroom activities or projects; (4) Demystify the scientific process for students. Join us to share your successes, challenges, and best practices. Let's build a resource for the community on how to make physics a more dynamic and human endeavor.

General Call for Contributed Talks & Posters:

Below is a list of general topics we commonly see at the meeting. If you are not sure that your presentation would fit into any topic in the more specific call above, consider submitting it under one of these more general topics.

- **Astro**
- **K-12**
- **Teacher Preparation**
- **Informal Physics**
- **Intro Courses**
- **Intro Physics for the Life Sciences (IPLS)**
- **Labs/Apparatus**
- **Two Year Colleges**
- **Artificial Intelligence and Other Technologies**
- **Beyond Intro Physics**
- **Belonging and Access**
- **Physics Education Research (PER)**
- **SPS Undergraduate Research**
- **Other**