PERC 2019 Presentations

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Archibeque, Benjamin, STEP UP: Analyzing Discussions of Underrepresentation
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Beatty, Ian D., Improving STEM self-efficacy with a scalable classroom intervention targeting growth mindset and success attribution
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Bennett, Michael B., What Factors Influence Pedagogical Methods in Informal Learning Spaces?
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Brewe, Eric, Instructional fingerprinting: network analysis of Framework for Interactive Learning in Lectures (FILL) data
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Bugge, Danielle, Studying student attitudes and motivation in a first-year physics course
Bumler, Jacqueline N, How do previous coding experiences influence undergraduate physics students?
Burd, Jan-Philipp, Evaluating and improving conceptual understanding of circuits in middle schools
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Chang, Sheh Lit, Applying text analysis to compare student explanations in PER
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Zwickl, Benjamin M, Agile, Scrum, Fishbones: Teaching Structured Problem-Solving in STEM Workplaces

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Chessey, Mary, Student activist strategies for creating a welcoming physics culture
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Hazari, Zahra, Breaking with Tradition: How Informal Learning Experiences in Physics Contribute to Physics Identity Development
Lau, Alexandra C, A framework for classifying learning opportunities in Faculty Online Learning Communities: A multipurpose tool with practical applications
Quan, Gina M., Longitudinal analysis of a student’s identity trajectory within the physics community
Wawro, Megan, Student Reasoning about Eigenvectors and Eigenvalues from a Resources Perspective
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Hyater-Adams, Simone, The Design of Performing Physics: using the CPI framework for program structure and analysis
Macias, Meghan, Magnetism, light, structures, and rotational motion: Mixed-methods study of visitors engaging with four exhibits at a science museum

Marckwordt, Jasmine, Developing interactive activities about complex topics for all ages: Quantum ideas in interactive science centers

McColgan, Michele, Siena Saturday Scholars: How understanding students creates valued outcomes

Muller, Ali, Design-based research project to develop a science and engineering education program linking field trip experiences to classroom experiences.

Prefontaine, Brean, It's not just about a physics identity: How informal programs can support multiple identities

Sanosa, David, Introducing Children to Computer Coding in Virtual Reality in an Interactive Science Center

Skinner, Ron, Educating informal educators to facilitate learning through practice-based facilitation.

Smith, Trevor I., Using IRT to rank incorrect responses FMCE questions

Spina, Alexis, Math and Making. Study of visitors exploring mathematics through knot tying, string art, tessellations, and minimal surface bubbles.

Stewart, John, The Second Dimension of the FCI is Mostly Medieval

Traxler, Adrienne, Network Analysis of Students Descriptions of Scientific Research

Van Dusen, Ben, Modernizing use of regression models in physics education research: a review of hierarchical linear modeling

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Binz, Steven, Cooperative Exploration of Electric Fields and Charges using AR

Brahmia, Suzanne White, Assessing the math+physics conceptual blend: A new mathematical reasoning inventory for introductory physics

Burkholder, Eric, Assessing adaptive expertise in undergraduate engineering curricula

Canright, Jared, Teaching Gauss’s Law using Virtual Reality: Motivation and Implementation

Chini, Jacquelyn J., Exploring Assumptions of Dis/Ability in Physics Education

Heckler, Andrew, Building up to complexity: synthesizing multiple concepts to solve problems

Hyater-Adams, Simone, Performing Physics: An Analysis of Design-Based Informal STEAM Education Programs

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Prefontaine, Brean, We Are Not Only Physicists: Creating Spaces That Support Students in Many Ways

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Van Dusen, Ben, Equity in College Physics Student Learning: a Critical Quantitative Intersectionality Investigation

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