

# GOING DEEPER WITH PHET INTERACTIVE SIMULATIONS

Ariel Paul

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## ABSTRACT

PhET Interactive Simulations project (<https://phet.colorado.edu/>) at the University of Colorado Boulder creates free interactive simulations and virtual labs for science and math learning. PhET simulations are teaching tools that can support conceptual learning and skill development, but they are most effective when used in a teaching context that makes use of evidence-based, student-centered teaching and learning practices. During this workshop, participants may spend time collaboratively designing an activity sequence using PhET's suggested strategies (whole-class inquiry, Interactive Lecture Demonstrations, clicker questions and Peer Instruction) and reflecting on guidelines for effective worksheet creation (including pre-labs, challenge prompts, and post-labs).

Intended Audience: There will be two separate workshops, one for University Educators and one for Secondary School Educators.

## PRESENTER



Dr. Ariel Paul consults on sim design teams and enjoys working on all aspects of visual design. He received his PhD in Physics at JILA in 2007, with research focused on coherent imaging with EUV light. Before joining PhET, Ariel completed an apprenticeship in scientific instrument making at the JILA Instrument Shop. In his free time, he teaches, climbs, and takes his dog Emmy on adventures in the Colorado outdoors.

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