

***Designing PhET Interactive Simulations to  
Promote Mathematical and Scientific Literacy***

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Since 2002, the PhET Interactive Simulations Project at University of Colorado Boulder has developed and studied the use of interactive computer-based simulations (sims) for teaching and learning STEM topics. These sims are available free of charge at <http://phet.colorado.edu>. In this session, we will explore PhET's research-based design principles in depth and discuss how these are used to create effective sims. We conclude with examples of how educators can use sims to support student learning in their classrooms.

Participants will have opportunities to engage with sims themselves, so we encourage participants to bring laptops or tablet devices to the session.