**Using PhET Simulations to Teach Physics**

In this session, we will discuss the suite of free simulations provided by the PhET Interactive Simulations project at University of Colorado Boulder and consider ways they might be used to enhance teaching and learning in physics courses.

**To do before this session:**

Visit the PhET Interactive Simulations webpage (<http://phet.colorado.edu>). Spend 5 minutes generally perusing the simulations in the physics category, and at least 5 minutes taking a close look at one of the simulations. Some popular ones are:

Circuit Construction Kit: <http://phet.colorado.edu/en/simulation/circuit-construction-kit-dc>

Energy Skate Park: <http://phet.colorado.edu/en/simulation/energy-skate-park>

Wave Interference: <http://phet.colorado.edu/en/simulation/wave-interference>

Wave on a String: <http://phet.colorado.edu/sims/wave-on-a-string/wave-on-a-string_en.html>

Moving Man: <http://phet.colorado.edu/en/simulation/moving-man>

Buoyancy: <http://phet.colorado.edu/en/simulation/buoyancy>

You will need a computer that runs Java and Flash to use these simulations – although we now have a few available in HTML5 if you follow the link at the top of the website.

If you have trouble running any of the simulations on your computer, please visit the PhET help center for instructions on troubleshooting common problems with running simulations:

<https://phet.colorado.edu/en/help-center/running-sims/general>

Each simulation provides a highly interactive environment which supports scientist-like exploration, makes the invisible visible, includes the visual models that experts use, and emphasizes the connections between real life phenomena and the underlying science.

Question to start considering as you play with these simulations:

1. How could these simulations help address content, process, and affective goals you have for your students?
2. Given the structures and technologies at your school, in what ways do you see these simulations being integrated?

  