**Idaho State University  
Physics Colloquium**

**Quantum Dot Studies with Time-Resolved Super-Resolution Microscopy**  
  
Dr. Megan Dunlap  
Pacific Northwest National Laboratory

Quantum dots (QDs) are semiconductor nanoparticles whose optical properties make them ideal candidates for a myriad of applications including imaging and light harvesting technologies. This talk will focus on the development of a fluorescence microscopy technique with exceptionally high temporal and spatial resolution. The technique allows one to monitor the directed energy transfer that occurs between multiple closely-spaced QDs and to identify regions within small clusters of QDs that are responsible for donating and accepting energy. We will also discuss how this technique can be used to identify multiple emission centers within a single QD.

**Monday, October 25 2021  
Via Zoom (**[**https://isu.zoom.us/j/84857098670**](https://isu.zoom.us/j/84857098670)**)  
4:00 – 4:50 pm**