**Idaho State University  
Physics Colloquium**

**An Exploration of Lyman-alpha Emission from Galaxies**  
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[University of Colorado at Boulder](https://www.colorado.edu/amath/)

Lyman-alpha Emitting galaxies or Lyman-alpha emitters (LAEs), star-forming galaxies selected through their strong hydrogen Lyman-alpha emission, are becoming an important probe of galaxy formation, cosmic reionization, and cosmology. I will present our recent and ongoing work towards understanding properties of those galaxies based on Lyman-alpha radiative transfer modeling, discussing the role of the anisotropic gas distribution around galaxies and the origin of the extended Lyman-alpha emission around LAEs. I will then talk about the anisotropic clustering of LAEs induced by the radiative transfer effect and the current observational status. During the talk, I will also discuss a few puzzles in the study of LAEs.

**Monday, October 18 2021  
Via Zoom(**[**https://isu.zoom.us/j/89223530729**](https://isu.zoom.us/j/89223530729)**)  
4:00 – 4:50 pm**