



PHYSICS AND ASTRONOMY COLLOQUIUM

Dr. Adrian Liu
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“The Past, Present, and Future of 21cm Cosmology”

Abstract

“Despite tremendous recent progress, gaps remain in our knowledge of our cosmic history. For example, we have yet to make direct observations of Cosmic Dawn or the subsequent Epoch of Reionization. Together, these represent the important period when the first stars and galaxies were formed, dramatically altering their surroundings in the process. Radio telescopes targeting the 21cm line will open up these crucial epochs to direct observations in the next few years, filling in a missing chapter in our cosmic story. I will review our recent results from the field, including the latest developments from the Hydrogen Epoch of Reionization Array (HERA), giving an overview of its promise to provide exquisite constraints on reionization astrophysics. I will additionally discuss our parallel efforts to explore possible ways to leverage machine learning to perform large-scale analyses with our data.”

Wednesday, March 17, 2021
3:30 p.m.

via Zoom: <https://uvic.zoom.us/j/81377096640>