

PHYSICS AND ASTRONOMY SEMINAR

Dr. Mike Boylan-Kolchin

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"The Faint Frontier of Galaxy Formation"

Abstract

The faintest stellar systems — dwarf galaxies and globular clusters in the nearby Universe and all galaxies in the reionization era — provide some of the most stringent tests of our theories of galaxy formation and dark matter. I will discuss how our understanding of these faint objects has evolved in the past 15 years, driven in large part by digital sky surveys and detailed spectroscopic observations, and provide an assessment of the current status of potential small-scale challenges to the prevailing LCDM cosmology. I will also describe deep connections between the nearby and distant faint frontiers. These links point to novel ways to test our models of galaxy formation and cosmology in the coming era of JWST, LSST, and 30m-class telescopes.

Thursday, August 3, 2017
2:00 p.m.
Engineering/Computer Science Building
Room 108