

PHYSICS AND ASTRONOMY SEMINAR

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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 Λ CDM cosmology. I will also describe deep connections between the nearby and distant universe in Λ CDM cosmology.