



Department of Physics and Astronomy  
SPRING 2024 Colloquium Series

# “The Distant Past of Nearby Galaxies”

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Within the past decades, exquisite observations of the dwarf galaxy population orbiting the Milky Way have progressively anchored our empirical understanding of the formation of low-mass galaxies and the growth of dark matter structures on galaxy scales. However, the Milky Way and its satellite galaxy population constitute a single galactic ecosystem, leading to questions of whether their properties are representative. In this talk, I will describe some of my work aimed at observing low-mass galaxies outside of the Milky Way system. I will focus on the Andromeda galaxy, presenting new Hubble Space Telescope observations of its dwarf galaxy population. I will highlight differences between the populations of galaxies around the Milky Way and Andromeda, that reveal the drastically different formation history of our nearest galactic neighbor. I will also introduce novel work with the James Webb Space Telescope, and efforts to develop the methodologies needed to study nearby galaxies with this new cutting-edge observatory.

**Thursday, April 4, 2024**

**4:00 - 5:20PM**

**MND1015**

*Open & Free to all students, faculty and public*