

# Neutron-capture Nucleosynthesis in Relics of the First Galaxies

*Tuesday, 4 December 2018 15:35 (30 minutes)*

Ultra-faint dwarf galaxies are ideal systems to perform stellar archaeology, as each galaxy provides multiple metal-poor stars sampling an independent burst of star formation and chemical enrichment from the early universe. In this talk, I will discuss the neutron-capture element signature in ultra-faint dwarf galaxies, which chemically distinguish these systems from most halo stars, globular clusters, and larger dwarf galaxies. The stars in these tiny galaxies display highly stochastic neutron-capture element enrichment, with a neutron-capture element floor of unknown origin. I will also show some early evidence that r-process elements provide a means to link ultra-faint dwarf galaxies to the Milky Way's old stellar halo.

## Affiliation

Carnegie Observatories

## Talk/Poster

Talk

**Primary author:** Dr JI, Alexander (Carnegie Observatories )

**Presenter:** Dr JI, Alexander (Carnegie Observatories )

**Session Classification:** s-/r-process