



## PHYSICS AND ASTRONOMY SEMINAR

# Dr. Giuseppina Battaglia

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## “Wide-Field Views of Local Group Dwarf Galaxies”

### Abstract

Dwarf galaxies are fascinating objects in many respects: as dark matter probes, since they appear to be the smallest galactic systems requiring the presence of dark matter; as the most numerous type of galaxies; but also because of the impressive variety of properties exhibited by such small systems. As larger galaxies, dwarf galaxies can be broadly classified into different types according to properties such as gas content, star formation histories and optical appearance. Understanding what caused the variety of dwarf types we see today, and whether they can fit in a common evolutionary framework, gives us important information on the mechanisms that drive galaxy evolution at the low galactic mass end. The Local Group is a great laboratory for such studies, since it contains dozens of dwarf galaxies that can be studied in great detail from their resolved stellar populations, with representatives from the various existing types. Here I will give an overview of the properties of Local Group dwarf galaxies, as obtained from wide-area photometric and spectroscopic surveys.

Friday, June 08, 2012

11:00 a.m.

Engineering & Computer Science Building

Room 130