

## Stellar Populations in the Local Volume

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**Abstract:** The study of resolved stellar populations in the Local Volume represents an anchor for many relations in astrophysics. High-precision, deep imaging observations of Galactic star clusters calibrate the theory of stellar evolution, wide-field surveys of stellar halos inform hierarchical merging models, and spectroscopy of disk and bulge stars yield the history of chemical evolution processes. The most frequent observational probes of these precious systems has involved either deep pencil beam studies of specific objects (e.g., HST imaging) or utilized wide field surveys to target an ensemble of objects to shallow limits (e.g., SDSS). A common aspect of most previous investigations of nearby resolved stellar populations is that they have focussed on visible-light studies. In this talk, I will discuss a new panchromatic survey that can be uniquely enabled through the synergy of these existing studies with a new high-resolution wide-field imaging survey from space. I will highlight the implications of this survey on several astrophysical topics, including the initial mass function, hydrogen burning limit, L and T dwarf evolution, star formation law, color-magnitude relation, and stellar mass loss processes.