

SES21-2021-000200

Abstract for an Invited Paper
for the SES21 Meeting of
the American Physical Society

Resolving the extended stellar halos of nearby galaxies: the future of Near-Field Cosmology

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The widely accepted Cold Dark Matter cosmological paradigm faces important challenges at the scales of individual galaxies. The study of resolved stellar populations in the nearest galaxies, or "near-field cosmology", provides key constraints on the physics underlying galaxy formation and evolution. In this talk, I will present ongoing panoramic imaging surveys of galaxies in the Local Volume performed with ground-based wide-field imagers and followed-up with a multiwavelength approach. Such surveys constitute the first accurate characterization of the past and ongoing accretion processes shaping the halos of these nearby galaxies and their satellite populations: they do not only quantitatively inform theoretical models of galaxy formation and evolution, but also represent a necessary testbed in preparation for the next generation of ground-based and space-borne telescopes.