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Abstract for an Invited Paper for the APR13 Meeting of the American Physical Society

Cluster Cosmology from Large Optical Surveys EDUARDO ROZO, SLAC

Upcoming optical surveys will allow us to explore the formation of structure in the Universe across half of its history. This data will place tight constraints on dark energy, departures from general relativity, and even the sum of neutrino masses. I will review how cluster cosmology will inform these questions, placing a special emphasis on the potential pitfalls of cluster cosmology, and how we plan to approach these with optical data.