

Abstract Submitted  
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**Identifying Satellites of the LMC** PETER CHI, Texas AM Univ —

Recent surveys, such as the Dark Energy Survey (DES), have discovered a multitude of dwarf galaxies around the Milky Way, many in close proximity to the Large Magellanic Cloud (LMC). We investigate the possibility that a fraction of these dwarf galaxies are satellites of the LMC using high resolution cosmological dark matter simulations. A set of dark matter subhalos capable of hosting the LMC are identified from the simulation, from which a sample of possibly bound sub subhalos are extracted and studied. We then compare the distribution of simulated subhalos to the observed satellites and calculate probabilities of whether they are satellites of the LMC.

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