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Abstract for an Invited Paper for the APR20 Meeting of the American Physical Society

Searching for Dark Matter in Distant Galaxies

NICHOLAS RODD, University of California Berkeley

Galaxies beyond our own represent some of the brightest potential sources of dark matter flux on the sky. As such they represent excellent candidates for indirect detection, which was the focus of my thesis, and in this talk I will demonstrate how to exploit this information to search for dark matter using the Fermi telescope. In particular I will outline how to map from an observed baryonic galaxy to its underlying dark matter distribution and a demonstration that our methods work in a simulated N-body environment.