

Revising the annihilation of Dark Matter in the Galactic Halo

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Recent numerical experiments have shown that a large fraction of the dark mass in our Galactic halo is not smoothly distributed but is condensed in virialized dark substructures as light as $10^{-6}M_{\odot}$. In this work we estimate the γ -ray flux expected from dark matter annihilation occurring within these minihalos, under the hypothesis that the bulk of dark matter is composed by neutralinos. We generated mock sky maps showing the angular distribution of the expected gamma-ray signal and assess its detectability with satellite-borne experiments such as GLAST.

