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Cosmic gamma-ray background anisotropies due to supersymmetric dark matter annihilation SHELDON CAMPBELL, Texas A&M University — One favored candidate for the dark matter in the universe is the lightest supersymmetric particle (LSP) in R-parity conserving supersymmetric extensions of the standard model of particle physics. Although stable against decay, the LSPs annihilate with one another and produce gamma-rays. Because of the large scale distribution of dark matter, anistropies in the gamma-ray background would trace the universe's large scale structure. This talk will summarize the halo model of large scale structure, present the predicted anisotropies due to dark matter annihilation in some supersymmetry models, and discuss the prospects for these anisotropies to be detected by future telescopes such as GLAST.

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