

Search for decaying dark matter with IceCube

Friday 6 July 2018 17:00 (15 minutes)

Dark matter particles may be metastable. If they decay into neutrinos, directly or indirectly, the signal is detectable with a neutrino telescope like IceCube, located at the geographic South Pole. IceCube instruments a cubic kilometre of ice with over 5000 optical sensors which detect the Cherenkov light emitted by particles produced in neutrino interactions in the ice. This talk will present recent searches for a decaying dark matter signal. For dark matter mass above 100 TeV, lifetimes below $\sim 10^{28}$ s are excluded for various decay channels, providing the strongest constraints to date.

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Session Classification: Astro-particle Physics and Cosmology

Track Classification: Astro-particle Physics and Cosmology