

Dark matter constraints from measurements of cosmic-ray positrons

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Cosmic-ray positron measurements provide a powerful probe of dark matter annihilation. A possible contribution to the measured positron flux could come from dark matter annihilating or decaying into e^+e^- pairs. In this work, we combine a detailed scan of the cosmic-ray propagation parameter space using Galprop with a new time-, charge- and rigidity-dependent model for solar modulation to present improved constraints on the dark matter mass in the range from 20 to 600 GeV from recently published cosmic-ray positron data.

Abstract Track

Flash talk, Astroparticle physics

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