

Thermal WIMPs on the Brink

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Weakly Interacting Dark Matter Particles (WIMPs) are among the most well-motivated models for particle dark matter. While these particles can be detected through direct, indirect, or collider experiments, only their indirect annihilation produces a guaranteed signal. Intriguingly, experimental searches using both gamma-rays and cosmic-rays are beginning to close in on this coveted “thermal annihilation cross-section”. Intriguingly, several excesses in Galactic center gamma-rays and cosmic-ray antiprotons have been discovered. Even more intriguingly, these excesses may be consistent with each other. In this talk, I will summarize the current state of the field, and argue that there is hope of resolving this puzzle within the next five years.

Abstract Track

Astroparticle physics

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