

Freeze-in Dark Matter Explanation of the Galactic 511 keV Signal

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We demonstrate, for the first time, the freeze-in dark matter, constituting 100% of the relic density can completely explain the Galactic 511 keV photon signal. In the talk, I will present two simple models for illustration. In both scenarios, the freeze-in mechanism generates the entire dark matter relic density, and thus any types of additional dark matter components produced from other sources are unnecessary.

Paper info

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Primary author: FENG, Wan-Zhe (Tianjin University)

Presenter: FENG, Wan-Zhe (Tianjin University)

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