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Extracting Dark Matter Halo Parameters with Overheated Exoplanets

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The Galactic centre serves as a laboratory for fundamental physics, particularly in the context of indirect dark matter searches. This study explores the potential of the James Webb Space Telescope to shed light on self-annihilating, sub-GeV dark matter candidates by examining their influence on exoplanet overheating and providing sensitivity estimates via probabilistic programming languages.

Primary author: BENITO, María (Tartu observatory, University of Tartu)

Co-authors: Dr SMIRNOV, Juri (University of Liverpool); Mr KARCHEV, Konstantin (SISSA); Dr LEANE, Rebecca (SLAC, Stanford); Prof. TROTTA, Roberto (SISSA); Mr PÖDER, Sven (KBFI)

Presenter: BENITO, María (Tartu observatory, University of Tartu)

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