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Origin of the gamma-ray emission from the Galactic Centre

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The Galactic centre (GC) is a bright gamma-ray source with the GeV-TeV band spectrum composed of two distinct components in the 1-10 GeV and 1-10 TeV energy ranges. The nature of these two components is not clearly understood. We present imaging, spectral, and timing analysis of data from ~7 years of observations of the Galactic centre by FERMI/LAT gamma-ray telescope complemented by sub-MeV data from approximately ten years of INTEGRAL/PICsIT observations. We discuss the implications of our observations for the hadronic and leptonic models of the emission from the GC. We also discuss the spatial morphology of the GC in GeV band and compare our results with the GeV dark matter excess claims.

Author: MALYSHEV, Denys (University of Geneva)

Co-authors: NERONOV, Andrii (University of Geneva); CHERNYAKOVA, Maria (DCU); WALTER, Roland

(University of Geneva)

Presenter: MALYSHEV, Denys (University of Geneva)

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