

GRAPPA @ 5: Celebrating 5 years of astroparticle physics and cosmology in Amsterdam



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The Galactic Center Excess with Skyfact

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An anomalous excess at energies of a few GeV is seen in the Fermi-LAT data.

Being well fit by an NFW profile and centered on the Galactic Center, this so-called Galactic Center Excess (GCE) has generated a lot of excitement over the past years due to its consistency with a dark matter origin. However, there exist viable astrophysical explanations, most notably unresolved millisecond pulsars. We present a new analysis of the GCE using the recently developed tool SkyFACT, reanalysing the morphology of the GCE.

It is found that a template tracing the stellar distribution in the bulge gives an equally good, if not better, fit to the data compared to an NFW template.

This result supports recent claims in favour of an astrophysical origin of the GCE.

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