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## The Characterization of the Gamma-Ray Signal from the Central Milky Way: A Compelling Case for Annihilating Dark Matter

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In scenarios where dark matter particles can annihilate to produce standard model, the galactic center of the Milky Way is expected to provide the highest flux from dark matter in the sky. Recently, we have worked on gamma-ray observations from the Fermi-LAT telescope, and have detected a significant extended excess, which is spherically symmetric around the position of the galactic center, and does not trace any known astrophysical emission profile. In this talk, I will summarize the current status of these observations and discuss dark matter and astrophysical interpretations of the data. I will show results which strongly constrain the properties and the possible interpretations of the observed excess. Finally, I will posit upcoming tests which will strongly suggest, or rule out, a dark matter interpretation.

### Summary

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