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## Indirect Dark Matter search at Intermediate Mass Black Holes

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### Abstract content

Under the assumption the Neutralino as lightest supersymmetric particle being the DM particle, studies of the evolution of Super Massive Black Holes expected in the center of most galaxies predict the existence of some 100-1000 Intermediate Mass Black Holes (IMBH) also in our galaxy [Bertone et al. 2005]. Since IMBHs did not suffer major merging and barionic accretion, they can have a very high density mini-spike DM distribution. The resulting high annihilation rate would make such objects very bright in gamma-rays.

We will present a strategy how to search for such objects as well as first results obtained with the MAGIC telescope.

**If this paper is presented for a collaboration, please specify the collaboration**

MAGIC

### Summary

### Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olivo, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 4 (HE part 1), pages 721-724

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