ID de Contribution: **85** Type: **Talk**

Reconstructing dark matter properties via gamma-rays indirect detection

lundi 26 juillet 2010 14:00 (20 minutes)

We study the capabilities of the FERMI satellite for identifying particle dark matter properties with gamma-ray observations from the Galactic Center. For the potential dark matter signal, besides the prompt gamma-ray flux
produced in dark matter annihilations, we also take into account the flux produced by inverse Compton scattering of the electrons/positrons generated in dark matter annihilations off the interstellar photon background. We
consider the full catalog of high-energy gamma-ray sources detected by FERMI, in addition to the diffuse galactic and extragalactic background. The impact of the degeneracies between the different dark matter annihilation
channels has been studied. We find that in many scenarios it will be possible to obtain significant constraints on the dark matter properties.

Auteur principal: Dr BERNAL, Nicolás (CFTP - IST)

Orateur: Dr BERNAL, Nicolás (CFTP - IST)

Classification de Session: Parallel session : Indirect Searches 1

Classification de thématique: Dark Matter Indirect Searches