## The Galactic Centre region in gamma rays

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The Galactic Center (GC) hosts a Super-Massive Black Hole (SMBH) of 410<sup>6</sup> Msun, Sgr A, which has apparently experienced phases of quasar activity in the past and might accelerate particles up to very high energy. The inner 150 pc also harbor intense star formation activity and many Supernova Remnants and Pulsar Wind Nebulae which

must also be the site of sustained particle acceleration. At GeV energies, the Fermi-LAT gamma-ray data show huge outflows extending 10 kpc above the Galactic disk pervaded by energetic particles, the so-called Fermi bubbles, but also several yet unidentified sources close to the GC. More recently, an additionnal 10 deg scale excess of gamma-ray emission peaking at few GeVs has been claimed.

At higher energy, multiple observations by Imaging Atmospheric Cherenkov Telescopes (IACTs) array such as MAGIC, VERITAS and H.E.S.S. have shown the proeminent contribution of two point sources, HESS J1745-2901 compatible with the position of SgrA\*, and HESS J1747-281 associated with G0.9+0.1, and a hard diffuse emission correlated with the dense matter distribution of the Central Molecular Zone over more than 1° in longitude. We will review these large amount of results collected during more than 10 years of intense study of the GC in gamma-ray, and discuss the possible origin of the observed emissions as well as their connection with the local known accelerators

and the cosmic-ray population in the Galaxy.

Primary author: Dr LEMIERE, ANNE (APC)Presenter: Dr LEMIERE, ANNE (APC)Session Classification: Gamma Rays

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