



Contribution ID: 138

Type: **Oral**

## Multi-year observations of the Galactic Center region with the MAGIC telescopes

*Monday 7 August 2017 16:30 (15 minutes)*

The Galactic Center region is one of the primary targets for observations with the current generation of gamma-ray telescopes. This attention is primarily caused by the presence of a black hole of 4 million solar masses, which provides a rare opportunity to study the interaction of a super-massive black hole with surrounding matter at a relatively close distance. Recently the interest to this region was increased by a series of exciting discoveries: the large, extended bubbles detected with Fermi/LAT, the envisioned burst of high-energy emission due to the passage of the G2 gas cloud, the likely pevatron nature of the primary source unveiled with H.E.S.S. and the discovery of a new source in the region, reported by the major Cherenkov telescopes MAGIC, H.E.S.S. and VERITAS. All these underline the complex physics of the region, revealed by deep gamma-ray observations.

In this talk I will present the results of the multi-year observational program of the Galactic Center region with the MAGIC telescopes, conducted at large zenith angle. I will discuss in detail the morphology of this region and compare it with predictions of several different models.

**Primary authors:** VOVK, Ievgen; FRUCK, Christian (MPP)

**Presenter:** VOVK, Ievgen

**Session Classification:** Galactic sources

**Track Classification:** Galactic sources (incl. transients)