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The first detection of the blazar S4 0954+65 at very-high energies with the MAGIC Telescopes during an exceptionally high optical state

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The blazar S4 0954+65 (at a redshift of z=0.368) underwent an exceptionally high state in optical during January and February 2015, as revealed by the Tuorla and St.Petersburg University blazar monitoring programs: a brightening of more than 3 magnitudes in the R-band from the average monitored states. Simultaneous data from the Fermi-LAT satellite at high energy gamma rays (100MeV < E < 100GeV) also show a period of increased activity.

MAGIC observations, triggered by these enhanced emissions in lower energy bands, led to the discovery of very high energy (VHE, E>100 GeV) emission from S4 0954+65 (ATel #7080). The VHE flux above 150GeV is estimated to be about 6% of the Crab nebula flux above the same threshold.

In this contribution we present a comprehensive multiwavelength picture of this object, including data from mm/optical/X-ray/HE and VHE gamma-ray bands along with analysis of the parsec scale jet behavior.

Collaboration

MAGIC

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