

MAGIC VHE gamma-ray observations of transient and variable stellar objects

Thursday, 29 October 2015 14:50 (0:20)

Abstract content

There are several types of Galactic sources that can potentially accelerate charged particles up to GeV and TeV energies. These accelerated particles can produce Very High Energy (VHE) gamma-ray emission through different processes, for example inverse Compton scattering of ambient photon fields by accelerated electrons. We study various transient and variable stellar objects in the VHE regime using observations made with the MAGIC telescopes. In this talk we will present data from four sources: LS I +61 303, Cygnus X-1, MWC 656 and SS433. The two binary systems LS I +61^o 303 and Cygnus X-1 were observed in long-term monitoring campaigns, eight and seven years, respectively. For LS I +61 303 we will present the latest results of our search for superorbital variability combined with contemporaneous optical observations. The microquasar Cygnus X-1, one of the brightest X-ray sources, has been well studied along a broad range of wavelengths. Here we present a search for steady and variable signal using combined X-ray and MAGIC observations. MWC 656 is a unique high-mass X-ray binary system as it is the only known binary to be composed of a Be star and a black hole. Finally, we will present our observations of the only super-critical accretion system known in our galaxy: SS433.

Primary author(s) : HADASCH, Daniela

Presenter(s) : HADASCH, Daniela

Session Classification : Gamma-Ray Astrophysics

Track Classification : Gamma-ray Astrophysics