Recent MAGIC results on Galactic binaries

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X-ray and gamma-ray binaries are systems consisting of a compact object and normally a non-degenerate companion star. Most of these sources have been shown to emit radiation in a broad frequency range, from radio up to X-rays and sometimes gamma rays. We report on recent results in very high-energy gamma rays above 100 GeV obtained by the MAGIC Collaboration for the Galactic X-ray binaries MAXI J1820+070 and 1A 0535+262, and the gamma-ray binary HESS J0632+057. Multiwavelength data at lower energies are also provided for a better contextualisation of the sources.

MAXI J1820+070 and 1A 0535+262 are not detected at VHE for MAGIC observations performed during exceptionally bright X-ray flares peaking at several times the flux of the Crab Nebula. In the case of MAXI J1820+070, the obtained flux upper limits, together with data at other frequencies, allows to set meaningful constraints on a potential gamma-ray emitter in the source. MAGIC observations of HESS J0632+057, performed mainly at orbital phases between 0 and 0.5, show significant orbital modulation of the source, with a flux peak at orbital phases between 0.2 and 0.4, and a valley around 0.5.