

## **MAGIC observations of the putative PeVatron SNR G106.3+2.7 in the proximity of the Boomerang PWN**

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MAGIC observations of the putative PeVatron SNR G106.3+2.7 in the proximity of the Boomerang PWN. The supernova remnant SNR G106.3+2.7 in the proximity of the Boomerang PWN has recently gained a lot of attention due to the emission above 100 TeV detected by HAWC, Tibet AS $\gamma$ , and LHAASO. This SNR shows a characteristic comet-like morphology in radio observations, with a head and a tail. Due to the limited angular resolution of air shower experiments, it is not clear if the emission comes from the head, where an energetic pulsar wind nebula is located, or from the tail, where a clump of molecular cloud is present. The MAGIC telescopes, with an angular resolution better than 0.1 degrees, observed G106.3+2.7 for 122 hours and found a significant gamma-ray excess elongated along the axis of the comet shape. We performed a spectromorphological analysis, and found the spectrum of the tail to be harder than the one in the head. This suggests that the 100 TeV emission detected by air shower experiments is from the tail. The multiwavelength spectrum of the tail emission favors proton acceleration up to energies of  $\sim 1$  PeV, while the emission mechanism of the head could be both hadronic or leptonic.

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