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## Prospects for the candidate PeVatron SNR G106.3+2.7 with the ASTRI Mini-Array

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The SNR G106.3+2.7, with its associated molecular cloud complex, is one of the candidate TeV counterparts of LHAASO J2226+6057, one of the 12 LHAASO Galactic Pevatrons. The other candidate is the Boomerang PWN, associated with the PSR J2229+6114. Different gamma-ray facilities have detected this VHE region with an elongated morphology: the SNR is located in the “tail” of the VHE emission and the PWN on the “head”. Identifying the exact location of the emission at  $> \sim 100$  TeV is a key factor in distinguishing between the hadronic or leptonic origin of the gamma-ray emission constraining the acceleration mechanism. The MAGIC telescopes resolved this TeV region for the first time, finding that  $E > 10$  TeV emission comes only from the tail region, where the SNR G106.3+2.7 resides. However, additional and more precise measurements are required to confirm these results.

In this context, the ASTRI Mini-Array, an array of nine small-sized (4-m diameter) imaging atmospheric Cherenkov telescopes at the Observatorio del Teide (Tenerife), can play a crucial role. With its unprecedented sensitivity and, in particular, angular resolution in the multi-TeV energy band, this facility will make an important contribution to understanding the nature of the TeV emission shedding light on its possible relation with CR origin.

Taking advantage of the latest important results reported by the MAGIC collaboration, this work aims at investigating the potential of ASTRI-MiniArray in studying the complex morphology of this source and showing the potential improvements which can be obtained thanks to deep observation of the source.

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