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Galactic PeVatron candidates in the LHAASO J1956+2845 sky region

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In recent years the number of known sources emitting in the TeV-PeV regime has increased significantly thanks to facilities like LHAASO and HAWC. The more natural candidates, for energetic and ambient properties, are pulsars and their environment.

However, due to the limited angular resolution of the current instruments, many of the observed sources have more than one lower-energy counterpart. The identification and the classification of these sources is one of the primary goals of future facilities as CTAO, thanks to the designed sensitivity and angular resolution above 1 TeV.

In this talk I will present the sky region containing LHAASO J1956+2845, a case study to test the CTAO performances. This region extends for about 2 degrees and contains three HAWC sources, two of which are spatially coincident with LHAASO J1956+2845. Three middle-aged pulsars and three SNR/PWN systems are located in the field, but the associations are yet to be done, and it is not clear yet which of them is the principal contributor to the ~100 TeV emission.

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