

# Pevatrons as a challenge in 21st century astronomy

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PeVatrons are natural particle accelerators that can accelerate particles with energies of up to 1 PeV. Although the term PeVatron was coined by the High Energy Stereoscopic System (HESS) collaboration in 2016 through the analysis of the galactic center, its era began in 2021 thanks to the discovery of ultra-high energy gamma-ray sources by highly sensitive observatories such as the High Altitude Water Cherenkov (HAWC) Observatory in Mexico, the Tibet AS-gamma Experiment in Tibet (led by the University of Tokyo, Japan) and the Large High Altitude Air Shower Observatory (LHAASO-LHAASO-KM2A). In this contribution, we briefly overview the PeVatrons and explain why the analysis of molecular observations is essential for their study.

References and acknowledgments:

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