

The hunt for the sources of cosmic rays

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The identification of the sources of cosmic rays is a complex problem since it requires the understanding of several intricate problems : the acceleration, transport, and potential reacceleration on many astrophysical sites.

Observations in the very—high—energy gamma—ray domain are now a powerful tool to directly study particle acceleration at numerous astrophysical sites. The next generation instruments (CTA, LHAASO, SWGO) will especially help to search for and study hadronic pevatrons, i.e. sources accelerating hadrons up to 10^{15} eV. These are of special interest for the community, since it is expected that the sources of Galactic cosmic rays can be pevatrons.