## **ICRC 2025 - The Astroparticle Physics Conference**



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## Lighting up the sky: What gamma rays reveal About supernova remnant shocks

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Gamma-ray observations over the past decade—from space-based instruments like Fermi-LAT to ground-based arrays such as H.E.S.S., MAGIC, and VERITAS—have provided an increasingly detailed view of supernova remnants (SNRs). Several dozens of SNRs have been detected in the GeV—TeV energy range, revealing a diverse population shaped by their environments and evolutionary stages, and new detections continue to expand the catalog of gamma-ray bright remnants. Observations by HAWC and LHAASO have even identified a few Galactic PeVatron candidates, though a direct connection to SNRs remains under investigation. Beyond remnants, gamma-ray detections from novae also underscore the ubiquity of shock-powered emission across explosive astrophysical systems. This presentation will highlight recent gamma-ray results offering fresh insight into the radiative signatures and energetic processes associated with supernova remnant shocks.

## Collaboration(s)

Author: LEMOINE, Marianne

Presenter: LEMOINE, Marianne

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