Invited talk: Galactic Sources of Very High Energy Gamma-Ray Emission: Highlights from Ground-Based Experiments

Tuesday, 27 October 2015 11:30 (30 minutes)

The three major ground-based gamma-ray experiments, H.E.S.S., MAGIC and VERITAS have carried out an extensive program of very high energy (VHE) observations of the Universe and revolutionized our view of the VHE gamma-ray sky. Studies at TeV energies are valuable for exploring the underlying energetic particle populations in Galactic systems. Galactic gamma-ray sources include shell-type supernova remnants (SNRs), pulsar wind nebulae (PWN), X-ray binary systems, pulsars, and the Galactic Center region and its halo, with PWN in particular, comprising the bulk of known galactic TeV gamma-ray emitting objects. H.E.S.S. has also carried out an unprecedented survey of the Milky Way Galaxy, revealing several Galactic VHE sources, and VERITAS has carried out a survey of the Cygnus region, covering targets previously studied by Milagro. The study of the Galactic VHE sky by ground-based IACTs is complemented by the recently-commissioned HAWC array in Mexico. We will report on some of the highlights of the VHE sky as revealed by ground-based atmospheric Cherenkov telescopes.

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