



Contribution ID: 152

Type: **Parallel Talk**

## Supernova remnants at TeV energies with VERITAS

*Monday 8 August 2022 14:20 (20 minutes)*

The origin of the cosmic rays (CRs) is a complex problem that requires a proper understanding of the CR's acceleration, diffusion, and radiation mechanisms. However, observations suggest that these properties of CRs depend highly on the initial supernova explosion conditions and the structure of the ambient material into which a supernova remnant (SNR) expands. Therefore, a source-by-source study is essential to probe the acceleration, diffusion, and radiation processes. With VERITAS, we have deep exposure to young and middle-aged SNRs such as Cas A and IC 443. We will show detailed spectral and morphological studies from these SNRs in GeV-TeV gamma-ray energies, which eventually can help us understand CRs acceleration and radiation mechanisms.

### Collaboration name

VERITAS

**Author:** KUMAR, Sajan (University of Maryland, College Park)**Presenter:** KUMAR, Sajan (University of Maryland, College Park)**Session Classification:** Galactic Sources**Track Classification:** Galactic Sources