

8th Heidelberg International Symposium on High-Energy Gamma-Ray Astronomy

Contribution ID: 99 Contribution code: GAL

Type: Review

Pulsars in the High-Energy Sky

Monday 2 September 2024 11:45 (45 minutes)

Observations at gamma-ray energies over the last ten to fifteen years have revolutionized the study of rotation-powered pulsars. The Fermi Gamma-Ray Space Telescope has now discovered over 300 gamma-ray pulsars at energies above 100 MeV, over half not previously known at other wavelengths. Pulsars were detected for the first time in very-high-energy gamma rays by MAGIC, VERITAS and H.E.S.S. telescopes, pushing known pulsed emission to as high as 30 TeV for the Vela pulsar. In concert with these discoveries were important advances in theoretical models of global pulsar magnetospheres that have finally determined the location of the high-energy particle acceleration and emission. I will review the current status and the open questions and challenges in applying the models to the recent observations.

Primary author: HARDING, Alice (Los Alamos National Laboratory)

Presenter: HARDING, Alice (Los Alamos National Laboratory)

Session Classification: Plenary