

Radio emission from Supernova Remnants

The vast majority of supernova remnants (SNRs) in our Galaxy and nearby galaxies have been discovered through radio observations, and only a very small number of the SNRs catalogued in the Milky Way has not been detected in the radio band, or are poorly defined by current radio observations. The study of the radio emission from SNRs is an excellent tool to investigate morphological characteristics, marking the location of shock fronts and contact discontinuities; the presence, orientation and intensity of the magnetic field; the energy spectrum of the emitting particles; and the dynamical consequences of the interaction with the circumstellar and interstellar medium. I will review the present knowledge of different important aspects of radio remnants and their impact on the interstellar gas. Also, new radio studies of the Crab Nebula carried out with the Karl Jansky Very Large Array (JVLA) at 3 GHz and with ALMA at 100 GHz, will be presented.