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Supernova remnants

JACCO VINK, Utrecht University

Supernova remnants are of general interest for astrophysics for two main reasons: 1) By studying supernova remnants we study the remains of an exploded star, thereby giving new data on explosive nucleosynthesis, explosion asymmetries, and explosion kinematics. 2) Supernova remnants offer an interesting mix of interesting physical processes: non-equilibrium ionization, non-equilibration of temperatures, and, currently a hot topic, cosmic ray acceleration. I will discuss several of these aspects, mainly from an observational point of view. A prominent place in this talk is reserved for the bright remnant Cas A, which shows evidence for radio-active Ti-44 in its interior, a bipolar explosion, and cosmic ray acceleration.