

G. Pühlhofer
P. Eger
V. Doroshenko
Y. Cui
H.E.S.S. collaboration

New constraints on the TeV SNR shells RX J1713.7–3946 and HESS J1731–347

Resolved TeV-emitting supernova remnants remain a small and precious class of sources to study cosmic ray acceleration in SNRs. We present new multi-wavelength results of the two prominent objects RX J1713.7–3946 and HESS J1731–347. For RX J1713.7–3946, extensive new H.E.S.S. data have permitted to study the nature of the TeV-emitting CR particles through improved broadband spectral studies, as well as through detailed investigations of morphological differences between TeV gamma-rays and X-rays. Concerning HESS J1731–347, the TeV morphology of the object and its surroundings has been studied using cosmic ray acceleration simulations of the object. The SNR also hosts a luminous X-ray emitting central compact object (CCO). Investigations of the CCO in X-rays and in the infrared have permitted to set interesting constraints on the SNR and its progenitor.