

Infrared observations of supernova remnants interacting with molecular clouds

Ho-Gyu Lee¹, Takashi Onaka¹, Bon-Chul Koo² et al.

¹ University of Tokyo

² Seoul National University

We present our infrared imaging and spectroscopic observations of supernova remnants using AKARI and Spitzer telescopes. Among them, some are bright in the entire observed infrared wavebands. Interestingly, they are supernova remnants interacting with molecular clouds. Their strong near- to mid-infrared emission can be explained by molecular hydrogen lines, which probably originate from shocks penetrating into nearby molecular cloud. However, there are additional features that cannot simply be explained by the molecular shocks. In this talk, we will discuss the origin of infrared emission of supernova remnant interacting with molecular cloud.