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Remnants of Core-Collapse Supernovae

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Supernovae (SNe) play an essential role in the Universe, and they are detected routinely through dedicated surveys. However, most of these SNe are often too distant ($\sim 1-100$ Mpc) to resolve the SN ejecta and immediate surroundings of the exploded stars. Fortunately, supernova remnants (SNRs) offer the means to study explosions and dynamics at sub-pc scales. SNRs are observable for up to 10^5 years after the explosions across the electromagnetic spectrum, and almost 400 SNRs have now been identified in the Milky Way and nearby galaxies. In this talk, I will review recent advances in the understanding of core-collapse (CC) SNe based on studies of SNRs. In particular, I will highlight investigations of SNR (a)symmetry and of heavy metal (like iron and titanium) abundances which give insight to the nature and mechanisms of the originating explosions.