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Supernova Remnants as Probes of Type Ia Nucleosynthesis

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I will review our present understanding of Type Ia Supernovae (SN), with an emphasis on the open questions about the explosion mechanism and the identification of their elusive progenitors. The study of nearby supernova remnants (SNRs) originated by Type Ia SNe has the potential to shed new light onto these long-standing open questions. SNRs in our Galaxy and the Magellanic Clouds are much closer than the extragalactic SNe that are discovered by the hundreds every year, which means that we can study the composition of the ejected material in much greater detail. We can also examine the structure of the ambient medium and the stellar populations around Type Ia SNRs and put constraints on the mass-loss rates and properties of their progenitors. I will conclude with some thoughts about the future of X-ray observations of SNRs.