Type Ia Supernova Remnant in the Large Magellanic Cloud

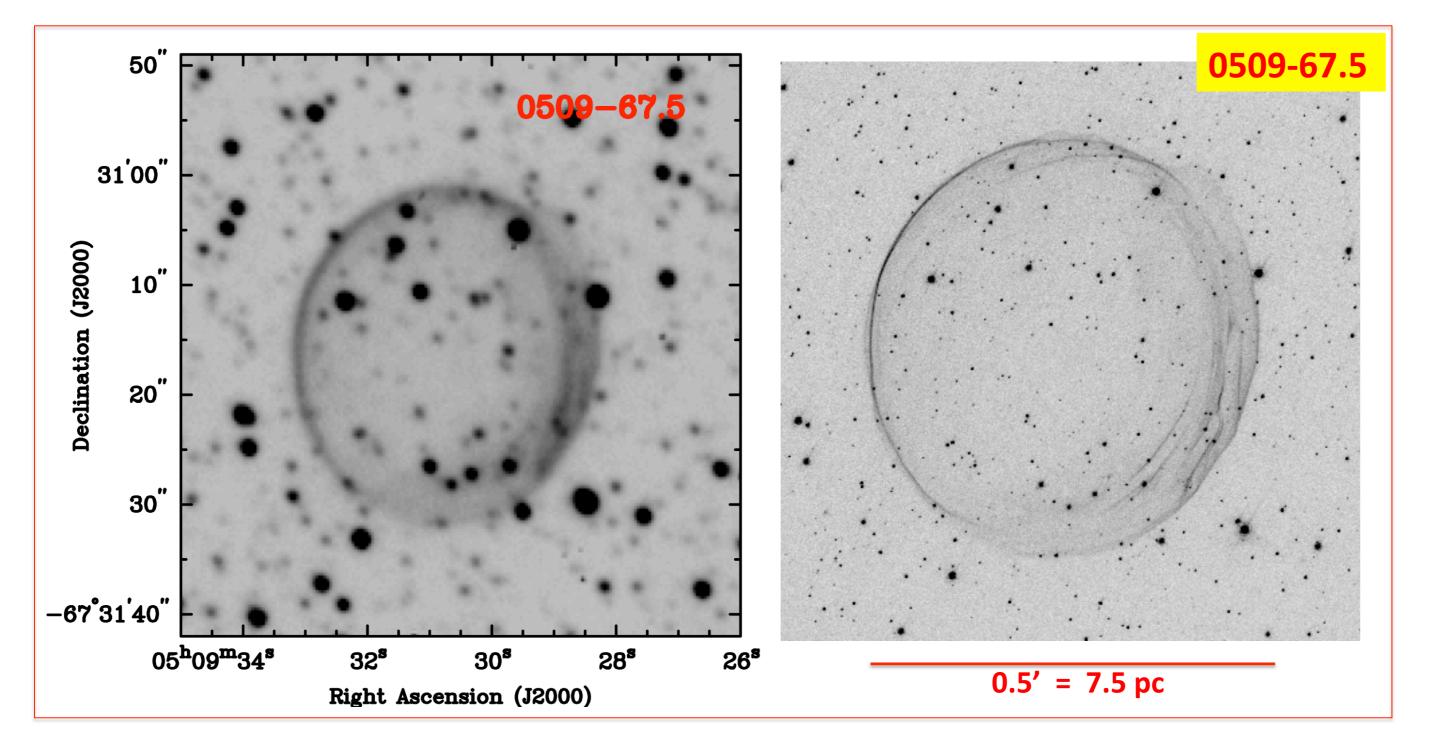
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Type Ia supernova remnants (SNRs) in the Large Magellanic Cloud (LMC) have been identified by Balmer-dominated optical spectra or Fe-enhanced ejecta abundance implied by X-ray spectra. ~10 Type Ia SNRs in the LMC are known.



- CTIO 4m and HST H α images of 9 Type Ia SNRs.
- The 5 smallest SNRs show Balmer-dominated shells.
- N103B and 0548-70.4 show nebular knots in SNR interiors, suggesting dense circumstellar material and likely single-degenerate progenitors.
- The 4 largest Type Ia SNRs show only shocked interstellar shells.
- DEM L316 contains a Type Ia SNR and a core-collpase SNR. Implication on their progenitors?
- 0454-67.2 is outside a superbubble around an OB association. A prompt Type Ia?

