

SN 1987A

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SN 1987A has provided us with the opportunity to learn more about core collapse supernovae than with any other event. The evolution of this object has been followed in great detail with all available observing facilities and delivered an unprecedented record of the explosion. There are many unique observations of this object: the neutrino burst indicating the collapse to a neutron star, the early evolution giving evidence that the progenitor star was a compact blue giant star and that there must have been significant mixing of the elements within the explosion, the circumstellar ring - presumably a remnant of the stellar evolution of the progenitor star, the formation of dust in the ejecta, and the shock interaction of the supernova ejecta with its surroundings. SN 1987A is the first supernova where we can observe the inner ejecta directly and can also follow the effects of shocks on the ring and the ejecta.

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