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# From massive stars to supernovae

*Monday 26 June 2006 10:00 (30 minutes)*

I will give a review on the evolution of massive stars and their paths to supernovae. Depending on their initial parameters, e.g., initial mass, metalicity, mass loss, and rotation, different kinds of supernovae are the result: normal core collapse supernovae, collapsar-powered supernovae like gamma-ray bursts, or even pair-instability supernovae. Similarly varied are the possible remnants of these supernovae and their nucleosynthesis. While the lowest mass stars may have only very little ejecta, the most massive pair-instability supernovae may eject as much as hundred solar masses in metals, out of which up to half can be radioactive nickel 56. I will present recent results of extended grids of nucleosynthesis of stars of low metallicity.

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**Session Classification:** 1 Stars: observations, evolution & nucleosynthesis

**Track Classification:** Element production, stellar evolution and stellar explosions