

Nucleosynthesis in massive and very massive Pop III stars

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Understanding the early chemical evolution of the Galaxy requires to understand the nucleosynthesis in the supernovae of the first generations of stars. The properties of these massive stars and of their explosions determine the nucleosynthesis patterns we expect. Unfortunately, direct observation of these supernovae will remain difficult except for some special cases. Conversely, indeed, the fossil records in ultra-metal poor stars may be used to derive properties of the first stars and their supernovae. Abundance trends in the early galaxy can give us clues about explosion properties of early generations of stars. In my talk I will aim to give a review of supernova nucleosynthesis yields from single massive and very massive Pop III stars. I will include results from recent studies on hypernovae yields for Pop III stars as well as for pair-instability supernovae.

Affiliation

Talk/Poster

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