

## Production of short-lived radioactive isotopes in the ejecta of core-collapse supernovae

The relic of short-lived radioactive isotopes (SLRs) with half-lives between 0.1 to 100 Myr can be used to probe the origin of the Solar System. While these isotopes were made in stars shortly before the formation of the solar system, their comparison with theoretical stellar models is extremely challenging. In this talk I discuss the comparison between the signature of 15 SLRs in different sets of core collapse supernovae models with the signature in the Early Solar System (ESS). Different progenitor masses and supernova explosion energies are considered. In particular, I will show that the discrepancy between the ESS and CCSNe models is not limited to the relative abundance of Al26 and Fe60, but many more SLRs isotope abundances are not reproduced. Some potential solutions are proposed, to be explored with future CCSN models.

### Length of presentation requested

Oral presentation: 8 min + 2 min questions (Poster-type talk)

### Please select between one and three keywords related to your abstract

Nucleosynthesis

### 2nd keyword (optional)

Origin of the Solar System

### 3rd keyword (optional)

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