The p-process in exploding rotating massive stars

Thursday 17 October 2024 11:20 (20 minutes)

Massive stars are thought to experience p-process nucleosynthesis when they explode as supernovae (and during their last hydrostatic burning stages to a smaller extent). Thanks to the mixing induced by rotational instabilities, rotating massive stars can experience an enhanced s-process during the core helium-burning phase. This can significantly affect the subsequent p-process during their explosions. In this talk, I will discuss how the p-process is altered in exploding rotating massive stars, and especially how the p-process yields depend on the initial rotation rate, the explosion energy and the nuclear uncertainties.

Length of presentation requested

Oral presentation: 17 min + 3 min questions

Please select a keyword related to your abstract

Stellar Models and Galactic Chemical Evolution

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