

# CEMP Stars as Probes of First-Star Nucleosynthesis, the IMF, and Galactic Assembly



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## The variety of CEMP-no abundances: back-and-forth mixing between H- and He-burning

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Stellar nucleosynthesis defines a sequence of abundances: - pure products of H-burning; - pure products of He-burning; - products of He-burning mixed into the H-burning region (class 2); - products of class 2 mixed in He-burning (class 3); - products of class 3 again mixed in H-burning zone (class 4). CEMP-no stars with enough observed data are distributed in classes 2, 3 and 4. Spinstars produce the abundances of classes 2-4 and account for CEMP-no enrichments, including some s-elements. The absence of anticorrelations Na-O and Mg- Al is discussed. Extreme class 4 abundances appear the closest ones to model predictions of GRB progenitors.

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