

First stars in the first structures

Tuesday 16 May 2023 09:00 (30 minutes)

Results from numerical simulations of primordial structure formation will be presented and their implications for early pristine population III stars and the transition to the following metal-enriched popII/I regimes will be discussed. A number of observables will be used to test different population III stellar models (in terms of mass and metal yields) and to rule out non performing ones, as well as to draw conclusions on the signatures of the first enrichment episodes in the infant Universe. By exploring the location within simulated galaxies of population III star formation episodes we will be able to assess whether they form preferentially in clustered environments or isolation, in the central regions or in the periphery.

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Session Classification: Day 2 morning