

# Chemical Enrichment by the First Supernovae with two AMR codes

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The first stars forged the first metals inside their stellar cores and eventually ejected them to the primordial IGM medium through supernovae explosions. These metals significantly influence the next generation of star formation. Therefore, it is very important to understand how these metals chemically enriched the early universe. In this poster, we use two popular codes, ZEUS-MP and FLASH, and modify them to simulate the explosion process of the first supernovae in the minihalos. We find the mixing of SNe ejecta caused by the Rayleigh-Taylor instability due to the explosion energy and halo masses. Our results can help to understand the abundance pattern of some metal-poor stars that are thought to form after the first stars.

## Affiliation

## Talk/Poster

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