

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



Contribution ID: 76

Type: **Invited presentation**

## Very Iron-poor Stars and an Update of the SkyMapper Extremely Metal-Poor Star Program

*Tuesday 10 September 2019 09:00 (30 minutes)*

The atmospheres of low-mass stars preserve information on the chemical and physical conditions of their birth gas clouds. Studying chemical abundances in the oldest, most metal-poor stars provides an observational window into the early Universe through which we can infer the properties and details of the earliest chemical enrichment events (e.g., supernovae, AGB stars).

The most metal-poor stars exhibit an enormous range in their relative chemical abundance ratios which demand a wide variety in the types of progenitors and their properties. I will present an overview and highlights of the chemical abundance patterns in metal-poor stars and the implications and insights into their progenitors as well as an update of our high-resolution spectroscopic follow-up of halo metal-poor star candidates from the SkyMapper Telescope.

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**Session Classification:** OBSERVATIONAL APPROACH: CEMP STARS, FIRST STARS, FIRST GALAXIES