

The FEROS/ESO and APOGEE-2 discovery of exotic chemical abundances across the Milky Way

APOGEE contains more than hundred thousands new giant stars. This enabled us to collect an unprecedented and homogeneous sample of giant stars with light-element abundance variations similar to observed in SG globular cluster stars. If they are really former members of dissolved globular clusters, stars in these groups should show some of the basic SG-like chemical patterns known for stars currently belonging to the Milky Way globular clusters, such as depletion in C and O together with N and Al enrichment. Here, I will present the results of an updated census of SG-like stars from a near-infrared and optical manual analysis using the BACCHUS code to provide the abundances of Light elements and heavy elements. Such stars have possibly migrated to the disk, halo and bulge as unbound stars, and become part of the general stellar population of the Milky Way. By combining Optical observations from FEROS/ESO with APOGEE-2 spectroscopy data, we are in a good position to put the big picture together, as well as add tightly constraints of the astrophysical sources that led to the unusual abundance patterns.

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Talk/Poster

Poster

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