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like some (but not all) similar stars, CS 29497-030 is a binary (P=342d), and the Pb and other s-process elements could have been synthesized in the envelope of a former AGB companion, perhaps significantly later than the formation of the star itself. Full details of our analysis and discussion are reported in Sivarani et al. (A&A accepted).

Abundance of Nitrogen in the Early Galaxy from the NH Band at 336nm

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Abstract. As part of the ESO Large Programme "First Stars", high-resolution, high-S/N spectra of 35 extremely metal-poor giants selected from the HK survey (Beers et al. 1992, AJ, 103, 1987; 1999, AJ, 117, 981) have been obtained at the VLT. The spectra were analyzed with the LTE spectral line code "Turbospectrum" and OSMARCS model atmospheres (Gustafsson et al. 1975, Plez et al. 1992, Asplund et al. 1997). Element abundances from C to Zn are presented in Cayrel et al. (2003, A&A, 416, 117), but nitrogen abundances from the CN band are lacking for most of the stars. We have used the NH band at 336nm to determine nitrogen abundances for all our stars. The dispersion in the relations of [N/Fe] vs. [Fe/H] (and [C/Fe] vs. [Fe/H]) is very large. However, a group of stars displays very low values of C/N, suggesting that their atmospheres are mixed with internal layers where the CN cycle has converted C to N. Supporting this theory, the relation (C+N) vs. [Fe/H] is flat, and the dispersion around the mean value is much smaller. For unmixed stars with [Fe/H]< −3.4, [N/Fe] is close to +0.1 and [N/O] close to −0.6, suggesting these ratios for the primordial production of N.

Behavior of Sulfur Abundances in Halo Stars Observed with HIDES at OAO

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Abstract. LTE and non-LTE (NLTE) abundances of sulfur of 21 metal-poor stars (mainly halo stars) and one normal star were explored in the metallicity range of −3 <[Fe/H]< 0, using high-resolution (~ 50000), high-signal-to-noise (~ 100–450) spectra of S\textsubscript{i} lines with the multiplet numbers of 1 and 6, which were observed with the 1.88 m telescope equipped with the High Dispersion Echelle Spectrograph (HIDES) at the Olayama Astrophysical Observatory (OAO). Equivalent widths of S\textsubscript{i}(1) (9212, 9228, 9237 Å) and S\textsubscript{i}(6) (869 3.9, 8694.6 Å) lines were analyzed to obtain the abundances. Iron abundances were determined from