

Neutron-Capture elements with HRMOS

Tuesday, 19 October 2021 09:00 (25 minutes)

Recently, we have studied barium lines in high-quality spectra of two metal-poor giants in the Galactic halo. The hyperfine splitting effects on the barium lines seem to confirm the theoretical expectation that both r-process events and also s-process contribution by rotating massive stars have polluted the ancient halo of our Galaxy.

Nowadays, this kind of result can be achieved only for a tiny fraction of Galactic stars and future surveys cannot tackle this problem due to the low resolution ($<30'000$) of their spectra.

Only HRMOS with its unparalleled capabilities will allow to change this situation and provide the final answers to the origins of the Heavy elements.

Type

invited talk

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