Contributed Talk

Splinter Populations

THE AMBRE PROJECT: $r$-PROCESS ELEMENT ABUNDANCES IN THE MILKY WAY THIN AND THICK DISCS

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Chemical evolution of $r$-process elements in the Milky Way disc is still a matter of debate. We took advantage of high resolution HARPS spectra from the ESO archive in order to derive precise chemical abundances of 3 $r$-process elements Eu, Dy & Gd for a sample of 4355 FGK Milky Way stars. The chemical analysis has been performed thanks to the automatic optimization pipeline GAUGUIN. Based on the [$\alpha$/Fe] ratio, we chemically characterized the thin and the thick discs, and present here results of these 3 $r$-process element abundances in both discs. We found an unexpected Gadolinium and Dysprosium enrichment in the thick disc stars compared to Europium, while these three elements track well each other in the thin disc.