EXPLORING THE ORIGIN AND EVOLUTION OF THE ODD IRON-PEAK ELEMENTS IN THE MILKY WAY STELLAR DISK

Chiara Battistini, Thomas Bensby

Lund Observatory, Sweden

We present abundance analysis results odd Iron peak elements (Sc, V, Mn and Co) in 714 F and G dwarf stars in the solar neighborhood. The stars have been kinematically selected to trace the Galactic thin and thick disks as well as well other velocity sub-structures in the solar neighbourhood. The abundances were determined through comparisons between observed high-resolution spectra and synthetic spectra based on the Uppsala MARCS LTE stellar atmosphere models. The results will increase our understanding of the origin of these elements, if are mainly produced during core collapse supernovae (SN II) or from core degeneracy supernovae (SN Ia) and if there is any correlation with the metallicity of the progenitor stars. In addition to this it could also help us to comprehend better the formation history and the structure of thin and thick disks in our Galaxy.