[ST03] Abundances of Iron Peak Elements of Metal-Poor Stars

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We have derived the abundances of iron peak elements(V, Ti, Cr, Mn, Co, Ni) including Sc, Cu and Zn of 31 metal-poor stars with iron abundances [Fe/H] ranging from -0.5 to -3.0. The present study is based on high resolution and high signal to noise echelle spectrograms at BOAO with BOES(R=30,000, S/N>200 at 5000 Å). The abundance analysis was carried out with a standard LTE line analysis and spectrum synthesis using plane-parallel LTE Kurucz atmospheric models. We will discuss the abundance trends of these elements as a function of the metallicity.

[ST04] N-body Simulations of the Dynamical Evolution of Rotating Star Clusters in Galactic Tidal Field

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We present N-body simulations for rotating and non-rotating star clusters with initial mass function in the galaxy to investigate quantitatively the influence of internal rotation and the galactic tidal effects on dynamical evolution. We considered an elongated orbit of clusters in the galaxy to take into account the time-dependent external gravitational field. All simulations were done for dozens revolutions around the galactic center. We confirmed that the more rapidly a cluster rotates, the faster it evolves dynamically. After several orbital periods, tidal tails of the cluster were developed. We found that the direction of tidal tails was in between the direction of the orbital motion and the direction of galactic center. For the initially rotating clusters in retrograde orbit, the direction of the rotation of the outer region is determined by the orbital direction, while the inner region remembers the initial sense of rotation almost up to the disruption time of cluster.