

[P02-1] The Yonsei-Yale Isochrones and the Stellar Evolutionary
Tracks for He-enhanced stars

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We constructed the stellar evolutionary tracks and isochrones for the stars with unusually high primordial Y abundance, on the assumption that some globular clusters have such stellar populations partially. These new isochrones cover from normal Y (primordial $Y=0.23$ & $dY/dZ=2$) to $Y=0.40$ with grid of $Y=0.30, 0.34, 0.40$. Metallicity and age coverages are restricted for $Z=0.0002-0.006$, and 3-20 Gyr for alpha-elements enhancement 0.3. It seems that they reproduce the observational data well for some globular clusters(Lee et al. 2005). We also adopted a new equation of state(EOS) for low mass stars below 0.7 solar mass. We compared some differences in the CMD features between old and new EOS.

[P02-2] Differential Reddening of the Globular Cluster M22

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We present a new photometry of the Galactic globular cluster M22 in U, B, V and I passbands. The sample of cluster member candidates obtained by the CMD-mask process has been used to study the differential reddening of this cluster. M22 has been the target of many studies because of the large color spread of its red giant branch (RGB) sequence, similar to that observed in Omega Centauri. However, unlike the case of Omega Centauri, the spread of RGB sequence of M22 is thought to be from the differential reddening not metallicity spread. We present a spatial variation of differential reddening of M22 using various combinations of filter sets.