

[구ST-15] Application of Yonsei-Yale isochrones to Globular Clusters in gri band

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Recent observations of Sloan Digital Sky Survey (SDSS) for the *ugriz* filters have provided the largest and the most homogeneous photometric database. Especially, the *ugriz* systems have been used in many telescopes, such as SDSS, CFHT, and Gemini, and will be applied next generation large telescopes. In addition, many stellar evolution models, like as PADOVA, BaSTI and DSEP, have introduced theoretical isochrones in *ugriz* system, to apply the isochrones into the photometry of stars in globular clusters. In this study, we transformed Yonsei-Yale(Y^2) isochrones to *ugriz* photometric system and fit the isochrones to the $(g-r, r)$, $(g-i, r)$, and $(r-i, r)$ CMDs of 13 globular clusters (Chun et al. 2009, Clem et al. 2008, An et al. 2008). We found that the derived ages from Y^2 -isochrones are 1~3Gyr younger and the estimated distance moduli are 0.3mag larger than the values inferred from the other isochrones in r-band. Also, the $E(B-V)$ are 0.02~0.04mag less than those estimated from the other models. The ages of each globular cluster estimated from Y^2 -isochrones are 12~14Gyr and distance moduli show good agreement with previous studies. From this result, we confirmed the availability of the Y^2 -isochrones in *gri* filters. However, it is a problem which will improve that $E(B-V)$ values obtained from Y^2 -isochrones are too small. Finally, the result of this study is expected to be used research of globular cluster in *ugriz* photometric system.

[포ST-16] Chemical abundance study of stars in IC 2391 and NGC 6475 : Determination of stellar parameters

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To understand about Gould Belt, we intend to study chemical abundances for two young open clusters - IC 2391 which is a member of Gould Belt and NGC 6475 which is not. UVES POP (Ultraviolet and Visual Echelle Spectrograph Paranal Observatory Project) provides the spectra of twelve stars in IC 2391 and five stars in NGC 6475 with spectral resolution R of 80,000. In this study, we have determined the stellar parameters (Teff, *logg*, metallicity, and microturbulent velocity) using Fe I and Fe II lines. The equivalent widths of iron lines have been measured by TAME. The results of stellar parameters are presented.