[구ST-15] CHEMICAL INHOMOGENEITY IN RED GIANT BRANCH STARS AND RR LYRAE VARIABLES IN NGC 1851

이재우
세종대학교 천문우주학과, 우주구조와 진화 연구센터

We explorer the double red giant and RR Lyrae variable populations in NGC 1851 using Ca uvby photometry. Our results suggest that the double red giant branches have distinctive abundance patterns against the calcium abundance and they appear to be closely related to the double subgiant branches discovered by Milone et al. in 2008. We also discuss the possibility of the hypothesis that the bimodal horizontal branch distribution in NGC 1851 is mainly due to the differences in metal content and age. Based on the period shift analysis of the RR Lyrae variables, the contribution from the helium enhancement appears to be insignificant.

[구ST-16] Revised GALEX Ultraviolet Catalog of Globular Clusters in M31

Kyoungsook Lee[1], Soo-Chang Rey[1], Yongbeom Kang[1], Youngkwang Kim[1] and Sangmo, T. Sohn[2]
[1]Chungnam National University, [2]Yonsei Univ. and Caltech

We present near-ultraviolet (NUV) and far-ultraviolet (FUV) photometry for the globular clusters (GCs) of M31 from mosaic images of Galaxy Evolution Explorer (GALEX). We construct UV-optical merged catalog of GCs (and GC candidates) in M31 by cross-matching between UV photometry and optical and near-IR photometry from Revised Bologna Catalog. The UV catalog of M31 GCs includes 510 GCs and 1050 GC candidates. We explored the general UV properties and age distribution of GCs comparing withthe stellar population models. We suggest UV color-color diagram has advantage of separating GCs very effectively from background galaxies and foreground stars than the case of optical color-color diagram.