

**[7ST-07] Globular clusters with multiple red giant branches:
Narrow-band calcium photometry**

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We have performed new narrow-band calcium photometry for Milky Way globular clusters (GCs) and detected multiple red giant branches (RGBs) in some massive GCs. Our new calcium filter was designed to avoid the CN contamination below 3883 Å and to measure only Ca II H&K lines. The fact that we are detecting multiple RGBs from the new filter is suggesting that they are indeed different in calcium abundance, which can only be produced by supernovae (SNe). Therefore, the presence of the multiple RGBs for the peculiar GCs in the calcium photometry is best understood if the later generation of stars are enhanced in some SNe products. In this talk, we will present our progress in the calcium photometry for the peculiar GCs showing the multiple RGBs.

**[7ST-08] Globular clusters with multiple red giant branches:
Low-resolution spectroscopy**

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Recent spectroscopic observations have provided evidences for the multiple stellar populations having different abundances in some massive globular clusters (GCs). In particular, some of these GCs show clear separations of red giant-branches (RGBs) in calcium narrow band photometry. In order to confirm the differences in heavy element abundances and radial velocities among multiple RGBs, we have performed the low-resolution spectroscopy for the RGB stars in these GCs. The spectral data were taken from the multi-object spectroscopic mode with WFCCD mounted on the du Pont 2.5m telescope in Las Campanas Observatory. In this talk, we will present our progress in the spectroscopic analysis of the RGB stars in these GCs.