

**[P-039/ST-3] Stellar Population Study of the Globular Cluster M15
using HST/ACS Archive**

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The presence of extended horizontal branch (EHB) in some Globular Clusters (GCs) is most likely due to the super-helium-rich subpopulation. In this paradigm, however, the well-known Sandage period-shift effect between the metal-poor (such as M15) and metal-rich (such as M3) GCs is still an open question. Here we introduce our on-going investigation of this problem using HST/ACS archive and Yonsei Evolutionary Population Synthesis (YEPS) models. We will present our preliminary results.

**[P-040/ST-4] Evidence from UV for the RGB split in the peculiar
globular cluster NGC 1851**

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There is a growing body of evidence for the presence of multiple stellar populations in globular clusters (GCs) with extreme horizontal branch (EHB). Among the EHB GCs, Milone et al. (2008) found double subgiant branch (SGB) in NGC 1851 from HST/ACS survey. Here we show from the ground-based UBVI photometry that the red giant branch (RGB) of this cluster is also split into two sub populations. We also confirm the split of the SGB in our color-magnitude diagram (CMD). Due to the sensitivity of U bandpass to metal abundance variations, the RGB split is only evident in UV CMD. Our population models suggest two different possible scenarios for the origin of two subpopulations: (1) the presence of helium and metal enhanced second generation subpopulation, and (2) two sub populations with different age and metallicity combinations.