# Age Distribution of Galactic Globular Clusters using HST Snapshot photometry

Young-Dae Lee and Soo-Chang Rey
Department of Astronomy and Space Science, Chungnam National University

We present relative ages for a sample of Galactic globular clusters (GCs) using their color-magnitude diagrams (CMDs) observed with the HST/WFPC2 camera in the F439W and F555W bands. The ages have been obtained by a differential comparison of the CMDs of GCs using $\Delta$(B-V)method, the color difference between main-sequence turnoff and the lower red-giant branch. All metal-poor GCs with [Fe/H] $<$ -1.7 show old (~12 Gyr) ages and are coeval. All the metal-rich GCs with [Fe/H] $>$ -0.8 are found to be ~0.8 Gyr younger than the most metal-poor ones. Intermediate-metallicity clusters (-1.7 $<$ [Fe/H] $<$ -0.8) are on average 2 Gyr younger than the most metal-poor counterparts, with a large age dispersion and a total age range of ~2 Gyr. We also discuss the correlation of relative ages with the horizontal-branch morphologies of GCs.