[S2-1] The Star Cluster system of the Merging Galaxy NGC 1487

Hye Jin Lee¹ and Myung Gyoon Lee²

1.2</sup> Astronomy Program, SEES, Seoul National University, Seoul 151 -747, Korea

We present a photometric study on the star cluster system of the merging galaxy NGC 1487, based on the BI photometry obtained from the F450W and F814W images in the HST/WFPC2 archive data. NGC 1487 is a peculiar galaxy showing three bright condensations in the center and two weak long tails in optical images, indicating that it is experiencing a merging process. To date nothing is known about the star clusters in NGC 1487. We have selected about 560 star cluster candidates in NGC 1487, using the morphological parameters of the objects detected in the images. The CMD of the bright clusters with 18.5 < B < 24 mag in NGC 1487 shows three distinct populations: a blue cluster population with $(B-I) \leq 0.45$, an intermediate-color cluster population with $0.45 < (B-I) \le 1.55$, and a red cluster population with (B-I) > 1.55. The intermediate-color population is the most dominant among the three populations. The blue cluster and intermediate-color clusters are strongly concentrated on the bright knots, while the red clusters are scattered over the galaxy. Age and mass of the bright clusters in NGC 1487 are similar to the super star clusters found in other merging/interacting galaxies. We conclude that the intermediate-color clusters are formed probably during the merging process about 600 Myrs ago.

[S2-2] The Globular Cluster System of M60 (NGC 4649)

Ho Seong Hwang¹, Sang Chul Kim², Hong Soo Park¹, Myung Gyoon Lee¹, Young-Jong Sohn³, Jang-Hyun Park², Seung Joon Oh¹, Sang-Gak Lee¹, Soo-Chang Rey³, Young-Wook Lee³, Ho-Il Kim²

¹Astronomy program, SEES, Seoul National University, Seoul, Korea

²Korea Astronomy Observatory, Taejon, Korea

³Center for Space Astrophysics, Yonsei University, Seoul, Korea

We present our spectroscopic study results of globular clusters (GCs) in the giant elliptical galaxy M60 (NGC 4649) in the Virgo cluster obtained from Multi Object Spectrograph (MOS) at the Canada-France-Hawaii Telescope (CFHT).

With the aid of photometric study of M60 GC system from deep wide-field ($16' \times 16'$) KPNO 4m + Washington CCD images and from the HST/WFPC2 archive data, we compile the photometric and kinematic data for 92 globular clusters (34 blue GCs and 58 red GCs) in M60.

With this photometric and spectroscopic database, we study the kinematics of M60 GC system from rotation to velocity anisotropy. And we also compare the kinematic properties of the M60 GC system to other gE systems. These can help us to understand the dynamical difference between blue and red GCs and to constrain the formation scenario of gEs.