areas of the Virgo cluster: the inner X-ray emission region and its outer region. We find a marginal conformity in color (> 2σ significance to bootstrap uncertainty) in the outer region, while no meaningful signal of small-scale conformity is detected in the X-ray emission region. We discuss the implication of this result, focusing on cluster mass assembly and cluster environmental effects on galaxy evolution.

[포 GC-22] NGC 6273 as a new building block candidate

Dongwook Lim, Sang-Il Han, Young-Wook Lee
Center for Galaxy Evolution Research & Department of Astronomy, Yonsei University

Recent studies for the Milky Way globular clusters (GCs) have reported that most of them host multiple stellar populations. However, only a few GCs have shown abundance variations in heavy elements such as iron and calcium. These GCs, as galaxy building blocks, are important to understand the formation of the Milky Way in hierarchical merging paradigm. In this study, we report our discovery from the Ca narrow-band photometry and low-resolution spectroscopy that NGC 6273 is a new Milky Way building block candidate.

[포 GC-23] Balmer Wing Formation in Active Galactic Nuclei.

Seok-Jun Chang, Hee-won Lee
Department of Physics and Astronomy, Sejong University.

Powered by a supermassive black hole, active galactic nuclei (AGNs) are characterized by prominent emission lines including Blamer lines. The unification scheme of AGNs requires the existence of a thick molecular torus that may hide the broad emission line region. In this configuration, it is expected that the far UV radiation from the central engine can be Raman scattered by neutral hydrogen to reappear around Balmer lines which can be identified observationally with broad Balmer wings. Another mechanism that can form Balmer wings is considered by invoking a fast moving medium around the central engine. In this presentation, we produce Balmer wings that are formed through Raman scattering and also those expected from a fast moving emission flow. It is noted that Raman Balmer wings exhibit stronger red part whereas the opposite behavior is seen in the Balmer wings obtained from a fast moving emission flow.

[포 GC-24] A New Selection Strategy of High Redshift Quasars: Medium-Band Observation with SQUEAN

Yiseul Jeon[1], Myungshin Im[1], Soojong Pak[2], and IMS/SQUEAN team[1,2]
[1]*CEOU/Astronomy Program, Dept. of Physics & Astronomy, Seoul National University*
[2]*School of Space Research, Kyung Hee University*

About 70 high redshift quasars with $z \geq 5$ have been discovered through combinations of standard broad-band filters to distinguish them from contaminating sources. However, among the discovered quasars so far, there is a redshift gap at $5 \leq z \leq 6$ due to the limitation of traditional filter sets and selection techniques. To understand the early mass growth of supermassive black holes and the final stage of the cosmic reionization, it is important to find a statistically meaningful sample of quasars with various physical properties. Here we suggest a new selection technique of high redshift quasars using medium-band filters: nine filters with bandwidths of 50nm and central wavelengths from 625 to 1025nm. Photometry with these medium-bands traces the spectral energy distribution (SED) of a source, similar to spectroscopy with R~15. We installed these filters to SED camera for QUasars in EArly uNiverse (SQUEAN) on the 2.1m telescope at McDonald Observatory, and conducted test observations of known high redshift quasars at $4.7 \leq z \leq 6.1$ and also dwarf stars for comparison. We found differences in SED shapes between high redshift quasars and dwarf stars, determined their locations on color-color diagrams, and demonstrated that the medium-band filters can enhance the efficiency of selecting robust quasar candidates in this redshift range. In this poster, we propose an effective selection method of high redshift quasars using these medium-band filters and discuss its effect on our high redshift quasar survey.

[포 GC-25] Gas and Stellar Kinematics of 9 Pseudo Bulge Galaxies

Kooksup Jo[1], Jong-Hak Woo[1], Kenta Matsuoka[2], Hojin Cho[1]
[1]*Seoul National University,*
[2]*Kyoto University*

We present the spatially resolved kinematics of