[GC13] Discovery of Bright Quasars at Low Galactic Latitude

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We report the discovery of 40 new bright quasars at low galactic latitude from the Seoul National University Quasar Survey in Optical (SNUQSO). Traditionally, quasars have been searched at high galactic latitude because of the severe stellar contamination at low galactic latitude. As a part of SNUQSO, we are undertaking a survey of low galactic latitude quasars, in order to (i) provide a complete census of quasar population; (ii) to discover quasars with bright stars nearby for efficient adaptive optics study for their host galaxy; and (iii) to study the galactic matters using quasar spectra. We have made an algorithm to find quasars at low galactic latitude using multi-wavelength information, and observed the targets with the 1.8m telescope and long-slit spectrograph in Bohyun Optical Astronomy Observatory (BOAO). Our observation finds new, bright quasars at the zone-of-avoidance, and that the new algorithm is highly efficient at selecting quasars.

[GC14] Properties of UV-selected star forming galaxies at z~1

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Recent studies on the star formation at high redshift suggest the downsizing picture that indicate the shift of star formation activity from massive systems to smaller galaxies. One obstacle to the interpretation of cosmic star formation history is the existence of dust, which generates the uncertainties between various star formation indicators. Although a large fraction of star formation at high redshift is explained by UV-selected Lyman break galaxies, little is known about their dusty nature. Finding local counterparts of LBGs in lower redshift universe is a way to understand the dust properties of LBGs. Also, the comparison between LBGs at z>3 and local LBG analogs is essential to describe the star formation history of the UV-selected systems. In this respect, we find the LBGs at lower redshift in the Spitzer First Look Survey field and investigate their properties. With the use of two different GALEX filters (FUV/NUV), we construct dropout galaxies with strong ongoing star formation at $\langle z \rangle \sim 0.7$ and $\langle z \rangle \sim 1.6$. Selected objects span the UV luminosity range of $-22 \leq M_{UV} \leq -17$, and the color criteria used is directly comparable to dropout methods. ~15 % of the UV-dropout objects are detected in Spitzer 24 micron image, enabling the investigation of UV to infrared ratio of these galaxies. In the talk, the change of star formation activity with the function of stellar mass, morphology and redshift will be discussed including early result of Akari observation that is useful to constrain dust properties.