

[PGC-01] **Flux Change in BL Lac**

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We present radio interferometric array observations of a quasar BL Lac. We found there was a flux change this year. We discuss a long term monitoring of flux density measurements.

[PGC-02] **Search for Satellite Galaxies of M106 and NGC 4631**

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We carry out a wide field survey of two spiral galaxies, M106, and NGC 4631 using CFHT megacam equipped with SDSS gr filters. We derive a photometry of both point-like sources and extended sources using digital photometry softwares, Source Extractor and ALFPHOT (an automated version of ALLFRAME/DAOPHOT). Based on images, photometry, and known properties in literature we identified 10 and 6 candidate satellite galaxies associated with M106 and NGC 4631, respectively. We also find 3 probable satellite galaxies for M106 and 2 for NGC 4631. Six out of ten satellite candidates of M106 locate along the semi-major axis of M106 and most of satellite galaxies are found north east region of M106. Majority of satellite galaxies of NGC 4631 are found in a narrow zone roughly along the semi-major axis of NGC 4631. We present an atlas of all satellite galaxies of M106 and NGC 4631, a photometry of individual sources in galaxies, and the surface brightness profiles of galaxies. An implication of galaxy formation based on these satellite galaxies will be discussed.