

Poster

Photometric Reverberation Mapping Project at the Zeiss-1000 of SAO RAS. Current status

Uklein R.I. (SAO RAS), Malygin E.A. (Kazan Federal University, Russia), Shablovinskaya E.S. (SAO RAS), Grokhovskaya A.A. (SAO RAS) and Perepelitsyn A.E. (SAO RAS)

Roman Uklein

Special Astrophysical Observatory of the Russian Academy of Sciences, Russia

The improvement of the calibration dependence for determining the size of the broad-line region (BLR) from the observed optical luminosity of active galactic nuclei (AGN) is a necessary task to study fundamental parameters of distant AGNs such as the mass of the central supermassive black hole. The most popular method of the BLR size estimation is the reverberation mapping based on measuring the time delay between the continuum flux and the flux in the emission lines. In our work, we apply the method of photometric reverberation mapping in mid-band filters, adapted for observations on the 1-m Zeiss-1000 telescope SAO RAS, for the study of AGN with broad lines in the range of redshifts $0.1 < z < 0.8$. The report describes the technique of observations and data processing, provides a sample of objects and demonstrates the stability of the used method.