

**THE FIRST RESULTS OF THE PHOTOMETRIC  
REVERBERATION PROJECT AT THE 1-M  
TELESCOPE OF SAO RAS**

MALYGIN EUGENE<sup>1</sup>, UKLEIN ROMAN, SHABLOVINSKAYA  
ELENA, GROKHOVSKAYA ALEKSANDRA

*Special Astrophysical Observatory, Russian Academy of Sciences (SAO  
RAS), Nizhny Arkhyz, Karachai-Cherkessian Republic 369167, Russia*

<sup>1</sup>E-mail: playground@mail.ru

The most popular method of supermassive black hole (SMBH) mass estimation in active galactic nuclei (AGN) is the reverberation mapping based on measuring the time delay between the continuum flux and the flux in the emission lines. We apply the method of photometric reverberation mapping in mid-band filters, adapted for observations on the 1-m Zeiss-1000 telescope of Special Astrophysical Observatory of Russian Academy of Sciences (SAO RAS), for the study of 8 AGN with broad lines. We present the first results for the two most bright objects of the sample – 2MASX J0853+77 and VII Zw 244. The central SMBH masses were estimated by the correlation analysis of the two-year time series provided by JAVELIN and spectral data obtained with SCORPIO-I/II at the 6-m BTA telescope of SAO RAS. Supported by the Russian Science Foundation: project no. 20-12-00030.