

*Invited lecture*

## CHARACTERISTICS OF THE LONG-TERM SPECTRAL VARIABILITY OF THE AGNs WITH BROAD LINES IN THE OPTICAL SPECTRAL BAND

**Nikolaj G. Bochkarev<sup>1</sup>, Luka Č. Popović<sup>2</sup> and Alla I. Shapovalova<sup>3</sup>**

<sup>1</sup>*Sternberg Astronomical Institute of Lomonosov Moscow State University*

<sup>2</sup>*Astronomical Observatory, Belgrade*

<sup>3</sup>*Special Astrophysical Observatory of the Russian Academy of Science*

E-mail: boch@sai.msu.ru

Active Galactic Nuclei (AGNs) with broad emission lines in the spectra (known as Type 1 AGNs) show variability in all wavelength range (from radio to gamma rays). We use our many-year long spectral and photometric observations of optical variability for investigations of the physics and kinematics of AGN central parts, i.e. the emission regions which are close to the super-massive black hole. Here we give an overview of the results of our analysis of AGN optical spectral variability in a sample of AGNs with broad emission lines.

*Invited lecture*

## SERBIAN – BULGARIAN MINI – NETWORK TELESCOPES: FIRST SIMULTANEOUS OBSERVATIONS OF VARIABLE OBJECTS

**S. Boeva<sup>1</sup>, G. Damljanović<sup>2</sup>, B. Petrov<sup>1</sup>, B. Spassov<sup>1</sup>, M. Sekulić<sup>2</sup> and  
G. Latev<sup>1</sup>**

<sup>1</sup>*Institute of Astronomy with NAO Rozhen, Bulgarian Academy of Sciences,  
72 Tsarigradsko Chausse Blvd., 1784 Sofia, Bulgaria*

<sup>2</sup>*Astronomical Observatory, Volgina 7, 11060 Belgrade, Serbia*

E-mail: sboeva@astro.bas.bg

We report first simultaneous multicolor observations observed in 2015 at 2m and 50/70 Shmidt telescopes of NAO Rozhen, 60 cm telescopes of AO Belogradchik and AS Vidojevica. We present 5-color lightcurves of the cataclysmic variables V425 Cas, V794 Aql, HZ Her and compare the photometric systems of the four telescopes used.