Progress Report

THE MID-INFRARED AND OPTICAL SPECTRAL LINE PARAMETERS FOR NLS1 AND BLS1 OBJECTS

M. Lakićević¹ and L. Č. Popović^{1,2}

¹Astronomical Observatory Belgrade; Volgina 7, 11060 Belgrade, Serbia ²Isaac Newton Institute of Chile, Yugoslavia Branch

E-mail: mlakicevic@aob.rs

Mid-infrared (MIR) spectra from Spitzer Space Telescope and optical spectra from Sloan Digital Sky Survey (SDSS) are used to derive various spectral line parameters that characterize AGNs, such as the policyclic aromatic hydrocarbons (PAH) strength and the parameters of broad and narrow line region of AGN (BLR and NLR, respectively). The connection of optical and MIR data is significant, although not always present, as MIR radiation comes from the torus and NLR, while optical data are from the BLR and NLR. Some parameters show the different correlations for narrow than for broad line AGNs (NLS1 and BLS1). That complements the known list of peculiarities of NLS1s. Here we discuss some assumptions that could describe observed condition, such as black hole growth and the inclination angle of BLR. This is a further step toward the understanding of geometry of AGNs.