

**VIRILIZATION OF THE BROAD LINE REGION
IN THE SDSS SAMPLE OF TYPE 1 AGNs**

N. Rakić^{1,2}, D. Ilić^{2,3} and L. Č. Popović^{1,2,4}

¹*Faculty of Natural Sciences and Mathematics, University of Banjaluka,
Republic of Srpska, Bosnia and Herzegovina*

²*Department of Astronomy, Faculty of Mathematics, University of Belgrade,
Studentski Trg 16, 11000 Belgrade, Serbia*

³*Humboldt Research Fellow, Hamburger Sternwarte, Universität Hamburg,
Gojenbergsweg 112, 21029 Hamburg, Germany*

⁴*Astronomical Observatory, Volgina 7, 11060 Belgrade 38, Serbia*

E-mail: nemanja.rakic@pmf.unibl.org, dilic@matf.bg.ac.rs, lpopovic@aob.rs

Usually, the virilization of the Broad Line Region of Active Galactic Nuclei (AGNs) is considered *a priori* and is widely used as an assumption for the estimates of the AGN supermassive black hole mass. Here we investigate the widths and asymmetry of the broad H β and H α emission lines in a sample of high quality (i.e. high signal to noise ratio) spectra of Type 1 Active Galactic Nuclei taken from the Data Release 16 of the Sloan Digital Sky Survey telescope, in order to explore possible deviation from the gravitationally bounded motion. We use the FANTASY (Fully Automated pythoN Tool for AGN Spectra analYsis) code for the multi-component modeling of the AGN spectra and for careful extraction of the broad emission line parameters.