

Variability in the AGN broad lines and continuum - an indication of SMBHB

Saša Simić¹ and Luka Č. Popović²

¹ *Department of physics, Faculty of Sciences, University of Kragujevac,
Radoja Domanovića 12, 34000 Kragujevac*

E-mail: ssimic@kg.ac.rs

² *Astronomical Observatory, Volgina 7, 11060 Belgrade, Serbia*

In compact binary systems distribution of matter around central parts in AGN could be very complex. Classical model with BL region around accretion disk is not probable since proximity of BH masses. Therefore, we proposed that only a fraction of BL region is sustained around each BH, which is delimited by Roche lobe. The rest of the BLR is distributed like envelope, surrounding the both BH components. We computed spectral energy distribution of continuum and H β line and studied the variation in emission spectrum. We showed that most of variability originate from dynamics of the system and initiated by relativistic boosting effect.