

EMISSION LINES AND INVESTIGATIONS OF THE CENTER OF
ACTIVE GALACTIC NUCLEI

D. ILIĆ

*Department of Astronomy, Faculty of Mathematics, Studentski trg 16,
11000 Belgrade, Serbia
E-mail: dilic@math.rs*

Abstract. Active galactic nuclei (AGN) are hosting a super-massive black hole (SMBH) in their center, that is actively fueled by surrounding gas through an accretion disk that produces different physical processes. These give the powerful broad band continuum emission together with the prominent emission lines. Sometimes AGN contain emission lines that are very broad (line widths of several 10,000 km/s) and often show very complex and variable line profiles. Here we will summarize some tools and techniques for studying the properties of the SMBH and the geometry and physics of the surrounding gas using the broad emission lines properties and their variability.