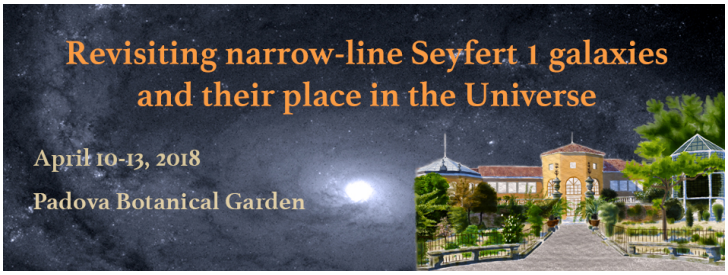

Contribution ID: **41** Type: **Talk**

Polarization in the broad lines of NLSy 1 galaxies

Tuesday, 10 April 2018 09:50 (20 minutes)

One of the characteristics of NLSy1 optical spectra is the narrower broad lines (FWHM~2000 km/s) and presence of strong Fe II lines around Hbeta. Additionally, very often, Hbeta and Halpha broad lines show Lorentzian like profile, that can indicate some specific kinematics of the broad line region (BLR). Polarization in broad lines can indicate the BLR kinematics (see e.g. Smith et al. 2005, MNRAS, 359, 846; Afanasiev et al. 2014, MNRAS, 440, 519; Afanasiev & Popovic 2015, ApJ, 800L, 35). Here we explore a group of NLSy1 galaxies (Mkn 335, Mkn 1501, Mkn 10,NGC 4051, Akn 564, Zw1, and PG0844+349), in order to constrain a dominant kinematics in the BLR. We found that in all observed NLSy1 the Kepelrian motion in the BLR is dominant. Using the method given in Afanasiev & Popovic 2015, we measure the masses of the central black hole in this sample of NLSy1 galaxies.

Motivation

Grant

no

Primary authors: Prof. POPOVIC, Luka C. (Astronomical Observatory, Belgrade, Serbia); AFANASIEV, Victor L. (Special Astrophysical Observotory, Russia); SHAPOVALOVA, All I. (Special Astrophysical Observatory, Russia)

Presenter: Prof. POPOVIC, Luka C. (Astronomical Observatory, Belgrade, Serbia)