

RADIATIVE TRANSFER MODELING OF AGN DUSTY TORI

Jacopo Fritz¹, Marko Stalevski²

¹ Sterrenkundig Observatorium, Universiteit Gent, Belgium

² Astronomical Observatory, Volgina 7, 11060 Belgrade 38, Serbia

The inner regions of AGN (accretion disk and BLR) are surrounded by the toroidal structure composed of dust. This dusty torus absorbs the incoming radiation from the accretion disk and re-emits it in the infrared domain. Thus, to study the observed shape and features of spectral energy distributions (SED) in the infrared, radiative transfer modeling of dusty torus is necessary. During the workshop, the participants in this section will discuss further development and applications of the two-phase model of dusty torus presented in Stalevski et al. (2011). The topics to be covered include: investigation of different dust compositions, SED variations due to the changes in the inner torus structure, influence of size of clumps and their actual arrangement on SED.

SPECTROSCOPY OF GRAVITATIONAL LENSING

Luka Č. Popović¹, Saša Simić²

¹ Astronomical Observatory, Volgina 7, 11060 Belgrade 38, Serbia

² University of Kragujevac, Faculty of Sciences, Department of Physics, Radoja Domanovića 12, 34000 Kragujevac, Serbia

The GAIA mission will be able to perform precise measurements of order of hundredth part of millisecond of arc. This will provide possibility to measure off-center changing of lensed quasars due to microlensing. Here we will investigate expected photocenter variability of lensed quasars due to microlensing. We will take into account the spectral bands in which the GAIA will work.