Seminarium Studium Doktoranckiego NCBJ

Thursday, 7 January, 9:00
https://www.gotomeet.me/NCBJmeetings/phd-seminar

Speaker:
Artem Poliszczuk (Studium Doktoranckie NCBJ)

Title:
Active Galactic Nuclei Catalog from the AKARI NEP-Wide field

Abstract:

I will present a new AGN catalog from the AKARI NEP-Wide field. Currently the standard method of Active Galactic Nuclei (AGN) selection in the data collected by the AKARI satellite is based on the near- and mid-infrared limits (Lee et al. 2007). This method allows to select AGN candidates with high efficiency at the expense of strong reduction of the catalog size. Our method is based on broad ensemble of supervised machine learning algorithms trained on spectroscopically confirmed sample. The AGN target selection for this sample was strongly influenced by the mid-IR selection. Our method shows high consistency with Lee et al. method, however it does not rely on mid-IR measurements, utilizing only near-IR AKARI passbands and new SUBARU/HSC optical data. New method gives more efficient way for AGN selection in optical and NIR data, being also an important preliminary study of upcoming surveys synergies such as LSST and Euclid.