**Seminarium Studium Doktoranckiego NCBJ**

**Poniedziałek, 27 maja, godzina 9:00**

**sala 404 w NCBJ, ul. Pasteura 7**

**Speaker: Artem Poliszczuk**

**Studium Doktoranckie NCBJ**

**Title: AGN selection in the AKARI NEP deep field with the fuzzy SVM algorithm**

Abstract: In my presentation I will describe a new catalog of reliable AGN candidates selected from the AKARI NEP-Deep field. Selection of the AGN candidates was done by applying a fuzzy SVM algorithm, which allows to incorporate measurement uncertainties into the classification process. The training dataset was based on the spectroscopic data available for selected objects in the NEP-Deep and NEP-Wide fields. The generalization sample was based on the AKARI NEP-Deep field data including objects without optical counterparts and making use of the infrared information only. A high quality catalog of previously unclassified 275 AGN candidates was prepared.