

## ΓΕΝΙΚΟ ΣΕΜΙΝΑΡΙΟ ΤΜΗΜΑΤΟΣ ΦΥΣΙΚΗΣ

# PHYSICS COLLOQUIUM

Thursday, 30 March 2017

17:00 -18:00

3<sup>rd</sup> Floor Seminar Room

" The hard X-ray view of galaxies "

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### Abstract

*X-ray observations of galaxies are our main tool for studying the populations of stellar remnants and the process of accretion on them. I will discuss recent breakthroughs based on the combination of new diagnostic tools and data from NASA's NuSTAR hard X-ray telescope. These observations gave us the first X-ray images of other galaxies above 10 keV, enabling the detection of extragalactic accreting stellar binary systems in the hard X-ray band. Based on this information we are able to study the accretion process and for the first time probe the types of compact objects associated with accreting binaries in environments other than our galaxy. These results provide important tests for our models for the formation and evolution of compact objects in binary stellar systems*