



ΓΕΝΙΚΟ ΣΕΜΙΝΑΡΙΟ ΤΜΗΜΑΤΟΣ ΦΥΣΙΚΗΣ

PHYSICS COLLOQUIUM

Thursday, 06 June 2013

17:00 -18:00

3rd Floor Seminar Room

**“Black Holes and Neutron Stars in our Galaxy as
Laboratories for Strong Gravity”**

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Abstract

Binary systems containing a black hole or a neutron star offer the best possibility to test prediction of General Relativity in the strong field regime. The plasma stripped from the non-degenerate companion star reaches the space-time in the immediate vicinity of the compact object and releases strong X-ray emission. The spectral and variability properties of this emission contain the signatures of predicted effects such as the presence of an innermost stable orbit and black hole spin. I discuss the current observational status with particular emphasis onto sub-second time variability, which constitutes the most direct measurement of the properties of the plasma accreting onto a collapsed star.