



ΓΕΝΙΚΟ ΣΕΜΙΝΑΡΙΟ ΤΜΗΜΑΤΟΣ ΦΥΣΙΚΗΣ

# *PHYSICS COLLOQUIUM*

Thursday, 2 April 2009  
17:00-18:00

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

## ***“SOLAR AXIONS”***

Prof. Konstantinos Zioutas,  
University of Patras

### Abstract

In this colloquium we will address the following issues:

- 1) How axions appeared in the particle and astroparticle physics landscape as well as in the Universe as candidates of dark matter elemental constituents.
- 2) Direct axion searches with state-of-the-art axion helioscopes like the Cern Axion Solar Telescope (CAST).
- 3) Axion(-like?) signatures in otherwise mysterious solar phenomenapersisting since decades-centuries.
- 4) Observationally motivated new ideas in this exciting field ask for more theoretical support.
- 5) Future Outlook of this kind of non-accelerator physics inspired in accelerator environment.