

ΑΡΙΣΤΟΤΕΛΕΙΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΟΝΙΚΗΣ

ΤΜΗΜΑ ΦΥΣΙΚΗΣ

ΣΕΜΙΝΑΡΙΟ

ΤΟΜΕΑΣ ΑΣΤΡΟΦΥΣΙΚΗΣ, ΑΣΤΡΟΝΟΜΙΑΣ ΚΑΙ
ΜΗΧΑΝΙΚΗΣ

Θέμα: **“Planets around very big and very small stars”**

Ομιλητής: ***Prof. Andreas Quirrenbach,
LSW, University of Heidelberg***

Ημερομηνία: **Παρασκευή 8-11-2013**

Τόπος: **Εργαστήριο Αστρονομίας, ΑΠΘ**

Ώρα: **12:00**

Περίληψη:

For our understanding of planetary system formation, it is important to determine how the number and characteristics of extrasolar planets depend on the properties of their parent stars. More than ten years ago, we started monitoring a sample of 300 giant stars with precise radial velocities, with the goal of detecting massive planets around them. We have found more super-Jupiter planets and brown dwarfs than expected, demonstrating that these objects are quite common around stars with about 2 Solar masses. We are planning to extend the radial-velocity technique to stars with very small masses in the framework of the CARMENES project, which is constructing two new high-resolution spectrographs for the 3.5m telescope on Calar Alto in Spain. By covering the visible and near-IR wavelength ranges simultaneously, this facility will be uniquely suited for the detection