

ΑΡΙΣΤΟΤΕΛΕΙΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΟΝΙΚΗΣ
ΤΜΗΜΑ ΦΥΣΙΚΗΣ

ΣΕΜΙΝΑΡΙΟ

ΤΟΜΕΑΣ ΑΣΤΡΟΦΥΣΙΚΗΣ, ΑΣΤΡΟΝΟΜΙΑΣ ΚΑΙ
ΜΗΧΑΝΙΚΗΣ

Θέμα: **“Mixed neutron-dark-energy stars and their oscillation spectrum”**

Ομιλητής: **Dr. Daniela Doneva**
University of Tuebingen

Ημερομηνία: **Παρασκευή 29-3-2013**

Τόπος: **Εργαστήριο Αστρονομίας, ΑΠΘ**

Ώρα: **12:00**

Περίληψη:

We study the oscillation spectrum of neutron stars containing both ordinary matter and dark energy in different proportions. Within the model we consider, the equilibrium configurations are numerically constructed and the results show that the properties of the mixed neutron-dark-energy star can differ significantly when the amount of dark energy in the stars is varied. The oscillations of the mixed neutron-dark-energy stars are studied in the Cowling approximation. As a result we find that the frequencies of the fundamental mode and the higher overtones are strongly affected by the dark energy content.