ΑΡΙΣΤΟΤΕΛΕΙΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΟΝΙΚΗΣ
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ΣΕΜΙΝΑΡΙΟ

ΤΟΥ ΤΟΜΕΑ ΑΣΤΡΟΦΥΣΙΚΗΣ, ΑΣΤΡΟΝΟΜΙΑΣ ΚΑΙ ΜΗΧΑΝΙΚΗΣ

Θέμα: « Some Thoughts on Mach's Principle and a Characteristic Acceleration in the Universe»

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Τόπος: Εργαστήριο Αστρονομίας

Ώρα: 12:00

Περίληψη

The goal of this informal talk is to raise some issues rather than settle them. General arguments concerning the basic notions behind Mach's principle will be presented, along with a simple calculation that argues why the inertial force is proportional to the acceleration; the coefficient of proportionality (in this specific calculation) is not exactly one, indicating discrepancy between inertial and gravitational masses that has to be settled by more refined arguments. A characteristic acceleration comes about from these arguments which is of order $c H_0$ where H_0 is Hubble's constant. This is similar to the acceleration implied by solutions of Weyl gravity and MOND that indicates possible connections with these theories and also with the recent discovery of the accelerated expansion of the Universe. Some thoughts related to these issues will be also presented.

Το Σεμινάριο θα γίνει στην «Αίθουσα Βασίλης Ξανθόπουλος» στο Αστεροσκοπείο