



## **SEMINARIOS DEL DEPARTAMENTO DE FÍSICA FUNDAMENTAL**

**Dr Anthony Randriamampianina**

M2P2 - UMR 7340 - CNRS et Aix-Marseille Université – France

### **“Inertia-gravity waves in a baroclinic cavity”**

Abstract:

Disturbances in the pressure field (other than compressional or sound waves) propagate in various forms of waves. Gravity waves are the familiar waves that propagate on the surface of water, but they also affect the interior of a fluid. In a stratified fluid such as the atmosphere or the ocean, these waves may propagate nearly vertically as well as horizontally. Gravity waves are an important feature of the earth's atmosphere, representing one of two classes of oscillation, rotational and gravitational, that are supported by a rotating, stably stratified fluid. Over the last decade, our appreciation of gravity waves has grown tremendously. These waves have been recognized for their role in momentum, heat, and constituent transport in several ways. The flow in an annular cavity which rotates uniformly with an angular velocity parallel to the acceleration of gravity and with the temperature of the inner cavity maintained at temperatures at different temperatures (the temperature of the inner cylinder is lower than that of the outer cylinder ) was presented in the previous seminar in order to study the baroclinic instability. In this seminar we will focus on the small scale inertia-gravity waves occurring simultaneously with baroclinic flow in some cases.

**Viernes, 11 de mayo de 2012, 11:00h**

**Sala 05, Facultad de Ciencias, UNED**

**Pº de la Senda del Rey, 9. (Puente de los Franceses)**