Subject: PhD grant, Convective oscillations in spherical geometry, Barcelona From: Juan Sanchez Umbria <<u>Juan.J.Sanchez@upc.edu</u>> Date: Wed, 11 Jan 2017 16:05:33 +0100

Dear colleagues,

The Spanish agency of research has published the final list of funded

projects of the call for proposals of 2016.

One of the associated predoctoral grants corresponds to our project

(FIS2016-76525-P, Convective oscillations in spherical geometry:

stability and generation of magnetic fields). The work to do during

the PhD period will consist in continuing the development, together

with the researchers of the project, of algorithms and the associated

software for the computation of equilibria and periodic orbits, and

their bifurcations, for systems governed by parabolic

partíal

differential equations. These codes will be applied to thermal

convection problems eventually coupled with the induction equation in

Cartesian or spherical geometries. Programming experience in either

Modern Fortran or C/C++ is expected or otherwise they will have to be

acquired at the beginning of the project, together with a basic

knowledge of Dynamical Systems and Numerical Methods.

We expect that the calling for these predoctoral fellowships will be opened in a few months, and that the period to apply will

be

short. Therefore possible candidates may contact the researchers of

the project Juan Sanchez Umbria

(juan.j.sanchez@upc.edu) and Marta Net

Marce (<u>marta.net@upc.edu</u>). Please send a PDF file containing a CV.

J. Sanchez Umbría and M. Net.