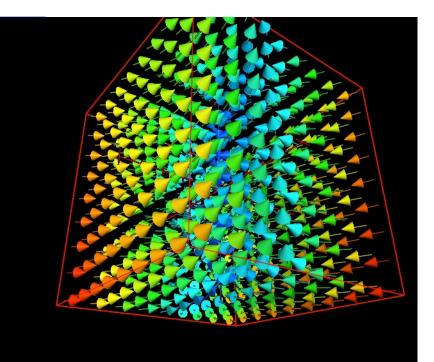# SCHOLARSHIP FOR DOCTORAL THESIS

Research Group:

Main Researcher:
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C. Zheng (UAM)

Scholarship for Doctoral Thesis

Research Project:
Analysis, numerics and optimal desing of partial differencial equations
MTM2005-00714

DESCRIPCION OF THE PROJECT.

This project is devoted to study some analytical properties of solutions of Partial Differential Equations and its numerical approximation schemes. We shall also address some closely related models like Stochastic Partial Differential Equations and hybrid discrete-continuous kinetic equations. Optimal design problems with applications to aeronautics in view will also be investigated.

More preciselly the subjects of our interest are the following ones:

- A. Numerical methods to dispersive equations and heterogeneous media
- B. Optimal Design
- C. Discrete Carleman Inequalities and numerical schemes
- D. Kinetic Equations
- E. Control of Stochastic Partial Differential Equations

REQUIRED SKILLS.Degree obtained after to the 1 of January of 2001.

The requests have to be sent directly to the Ministry of Education (http://www.mec.es/ciencia/jsp/plantilla.jsp?area=becasfpi&id=31) before 15 days from the publication in the BOE.

Please submit a copy of the request and the CV to the direction: miguel.cea@uam.es.