



## Two Marie-Curie PhD Fellowships in Bath/Eindhoven



Start: October 2010

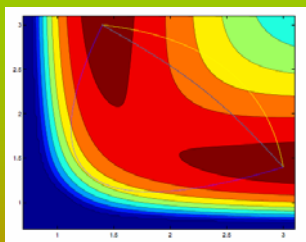
These three-year projects are funded by the EU project **FIRST** ([www.mat.ucm.es/~FIRST](http://www.mat.ucm.es/~FIRST))

They are open to any applicant who has not lived in the UK or in the Netherlands for more than 12 months out of the last five years.



### Project 1: *Mathematics of Folding Rock*

Rocks fold into complex patterns with geometrical singularities. This project will use a variational method to describe and predict these patterns and give insight into the geological history of the earth.



### Project 2: *The Micro-Macro Passage for Chemical Reactions*

The law of mass action describes how chemical compounds react. In this project we aim to recover this law from a mathematical model of interacting particles, giving new understanding of the microscopic basis of chemistry.

**Project 1** will be supervised by *Giles Hunt* and *Chris Budd* (Bath) and *Mark Peletier* (Eindhoven). **Project 2** by *Johannes Zimmer* (Bath) and *Mark Peletier*. The first two years will be spent at the **University of Bath, UK**, where in 2010/11 all supervisors will be present, and the third year at the **Technical University, Eindhoven, the Netherlands**.

We are seeking 2 candidates with a strong mathematical background and an interest in working in a multidisciplinary environment. Interested candidates can contact *Chris Budd* ([mascib@bath.ac.uk](mailto:mascib@bath.ac.uk)), *Johannes Zimmer* ([zimmer@maths.bath.ac.uk](mailto:zimmer@maths.bath.ac.uk)) or *Mark Peletier* ([m.a.peletier@tue.nl](mailto:m.a.peletier@tue.nl)).

**Deadline for application: June 15<sup>th</sup>, 2010**