

ESF RESEARCH CONFERENCES

Rapporteur Report

Partnership:	ESF-ERCOM-EMS
Conference Title:	Applied PDEs in Physics, Biology and Social Sciences: Classical and Modern Perspectives
Dates:	2-7 September 2012
Chair:	Dr. Marco Di Francesco, Universitat Autònoma de Barcelona, ES
Rapporteur:	Prof Mats Gyllenberg, University of Helsinki, FI

General Comments

Partial differential equations (PDEs) have had a central role in modelling physical phenomena since the 18th century. In the 20th century PDEs also entered the biological sciences as a modelling tool and recently they have started to influence the social sciences. Despite their long history, PDEs still form an active field at the research frontier of modern mathematics.

Each year a great number of conferences on PDEs are arranged all over the world. Typically, they are concentrating on applications in a particular field. What made this conference unique is the interdisciplinary approach with participants developing and analysing PDE models in a wide area of scientific disciplines.

Quality of Scientific Programme, Presentations and Discussion

The scientific programme was well composed with leading experts giving presentations on different areas of applications of PDEs. The scientific quality was high.

Informal Networking and Exchange; Atmosphere

The schedule was well thought through. The breaks were sufficiently long to allow for informal discussion. The locality of CRM was also well suited for such discussions. Most of the lectures were given by senior scientists, but in the poster session the younger generation could make their work known. I particularly enjoyed the poster session.

Balance of Participants

The balance between participants of different age, gender, nationality and scientific fields was appropriate.

Outlook and Future Developments

New collaborations will most likely emerge from this conference. People working with a particular application learnt a lot from people working with different applications. Methods and ideas were transferred between fields. It is a pity that the ESF Research Networking Programmes (RNP) instrument has been cancelled, because this conference could well have led to a new RNP.

Organisation and Infrastructure

The CRM has a long experience of organising conferences and so has ESF. This was evident in the excellent arrangements. The on-site administration and support made life easy for the participants.

Summary & Overall Assessment

I found this conference to be very successful. The aims and goals put forward in the application were achieved.

Mats Gyllenberg September 15, 2012

About ESF Research Conferences

The Scheme

This conference is part of the European Science Foundation's (ESF) Research Conferences Scheme. The Scheme aims to promote scientific excellence and frontier level research throughout Europe and the rest of the world. Conferences aim to provide leading scientists and other participants, including young researchers, with a platform to present their work, to discuss the most recent developments in their fields of research and to network.

Conference Format

The core activities should be based on lectures by invited speakers, who are leaders in their respective fields, followed by extensive discussion periods. An informal exchange of ideas, both inside and outside the lecture room, should be encouraged, and the number of sessions in the daily timetable should be limited in order to allow sufficient time for interaction between the participants. Time should be reserved for a 'Forward Look Plenary Discussion' about future developments in the field.

Participants can take all their meals together to encourage further contact and networking, which can be particularly beneficial to younger researchers who may be less outspoken in the formal lecture room setting. In order to gain optimum benefit from the conference, both the speakers and the participants are asked to stay for the whole duration.

Division of Tasks

The Conference Chair is responsible for ensuring the quality of the scientific programme through the selection and invitation of speakers, and through the selection of participants.

The ESF Conferences Unit is responsible for managing all the logistical aspects of the conference organisation, including the provision of an on-site secretariat.

Further information: www.esf.org/conferences