

ESF RESEARCH CONFERENCES

Rapporteur Report

Partnership:	ESF LFUI
Conference Title:	Continuing Challenges in Earthquake Dynamics: New Methods for Observing and Modelling a Multi-Scale System
Dates:	24-29 September 2011
Chair:	Prof. Sandy Steacy
Rapporteur:	Dr. Shane Murphy

General Comments

The aim of the conference was to bring together scientist from a number of different scientific fields who study earthquakes to discuss the challenges facing understanding earthquakes. The conference brought together a number of disparate scientific fields each of which has an unique view point in understanding earthquake dynamics but which often work in isolation of each other. Presentations and discussions at the conference centred around recent advances/results in these different fields as well as analysis of catastrophic earthquakes which have taken place in the last few years.

Quality of Scientific Programme, Presentations and Discussion

The oral presentations were split into 4 sessions with 28 oral presentations and 23 posters presented at the conference over a four day period. The conference provided a multi-disciplinary look at earthquakes with scientific programme containing talks given by laboratory experimentalists, statisticians, numerical modellers, observational seismologist and geologists. The scientific quality of the presentations was very high with many leading scientists in their fields giving presentations on very recent earthquakes (for e.g. Tohoku earthquake in Japan and the Canterbury/Christchurch earthquake in New Zealand).

An adequate amount of time was given over to discussion. The programme was well set up so that speakers fielded questions at the end of their presentations and there were half an hour slots set aside of general session-wide discussions. In both cases there was good interaction between the audience and speakers providing lively discussions on a range of topics.

Informal Networking and Exchange; Atmosphere

The location of the conference was idea for informal networking – by locating the meeting in a remote location whereby participants dined together provided an excellent atmosphere for networking in a beautiful location. During coffee, lunch, dinner breaks as well as the periods of free time there was adequate time and space for informal discussion to take place. The poster session was a particularly successful means of generating informal discussions between researchers.

Young researchers were well integrated into the programme. Some researchers were given the opportunity to give talks in the oral sessions whilst the rest gave poster presentations. The use of a poster pitching session, whereby all the people with posters provided a reason to come see their poster was a good way of interesting people to come see there poster. The poster session itself was a success with discussion around posters continuing well into the night.

Balance of Participants

There was a good balance of participants from around the globe (i.e. Europe, USA, Japan and New Zealand). This was particularly relevant for the discussions involving the recently catastrophic earthquakes in Italy, Japan and New Zealand where delegates from these countries provided current information about these recent earthquakes. The gender balance was also good with both sexes well presented in all aspects of the meeting (attendance, presenting, chairing of sessions).

There was also a good ratio between young researchers and more established researchers. In the Forward Look session time was also given over to early stage researchers to ask questions which was good way of bringing them into the discussion.

Outlook and Future Developments

The conference provided an excellent opportunity for researchers to network informally, given keen interest in the discussions during the oral and poster sessions it is very likely that new collaborations will emerge from the conference at an informal level.

During the forward look session it was decided that the ESF research conference provides an excellent instrument for the earthquake community to use. By meeting every 2-3 years, it provided the community with the possibility of discussing the most recent developments in earthquake science as well as the most recent destructive earthquakes on a global scale.

Follow-up

One of the main discussions in the Forward Look centred on the need to better convey the uncertainty in the information that is provided by earthquake researchers to the authorities, NGO's and the general public (i.e. it is difficult for people to understand the risk posed by catastrophic events which have very long recurrence times). It was the general view that another problem is matching the data provided by the researchers with expert judgement in terms of the authorities and governance. A follow up on this debate could be an ESF Forward Look involving policy makers and social scientists to investigate the area of information dissemination and evaluation by experts for extreme events.

Organisation and Infrastructure

The only problem with the destination is possibly the difficulty in getting to it – Innsbruck is not a large airport and so the choice of international flights into it is limited. However it's remoteness makes it ideal for forcing the researchers to talk to each other as they cannot break away with the friends and socialise separately. The catering at the conference was excellent with the participants with special dietary requests being accounted for also. On-site administration and support was also excellent. The fact that the conference ran very smoothly is a credit to the conference officer, Alessandra Piccolotto.

Summary & Overall Assessment

The conference set out to discuss the challenges facing seismology over a variety of disciplines. The collection of top researchers from a range of range of scientific backgrounds insured a good scientific content. There was good informal interaction between researchers and the early stage researchers were encouraged to participate in the meeting throughout the conference in terms both presenting their work and participating in the discussions. The conference successfully achieved its aims.

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