

OPERATIONAL EARTHQUAKE FORECASTING AND DECISION MAKING

Program Meeting



Villa Monastero, June 8-11, 2014
Varenna, Italy

SUNDAY 8 JUNE 2014

- 08:30-08:40 **Welcome**
08:40-08:55 The European REAKT project
08:55-09:00 Introduction to the workshop

1. The Problem of Earthquake Forecasting

- 09:00-09:30 The problem of earthquake forecasting (**T. Jordan**)
09:30-10:00 Earthquake forecasting when the background rate is non-stationary: the case of the U. S. midcontinent (**B. Ellsworth**)
10:00-10:30 Coffee break
10:30-11:00 Forecasting induced seismicity: state of the art and future directions (**S. Wiemer**)
11:00-12:00 **Panel discussion 1.** Moderator: **I. Main** Reporter: **M. Page**
12:00-13:00 **Poster session**
13:00-14:30 Lunch

2. Testing Short-term Earthquake Forecasting Models

- 14:30-15:00 The Collaboratory for the Study of Earthquake Predictability (**D. Schorlemmer**)
15:00-15:30 Results of the testing phase for short-term earthquake forecasting models (**J. Zechar**)
15:30-16:00 Coffee break
16:00-16:30 CSEP developments in support of operational earthquake forecasting: a future perspective (**D. Rhoades**)
16:30-17:30 **Panel discussion 2.** Moderator: **N. Hirata** Reporter: **M. Werner**

MONDAY 9 JUNE 2014

3. Operational Earthquake Forecasting

- 09:00-09:30 Operational earthquake forecasting in Italy (**W. Marzocchi**)
09:30-10:00 The science and implementation of operational earthquake forecasting in the United States (**N. Field**)
10:00-10:30 Coffee break
10:30-11:00 Recent experiences in operational earthquake forecasting in New Zealand: the good and the bad (**M. Gerstenberger**)

11:00-12:00 **Panel discussion 3.** Moderator: **R. Stein** Reporter: **M. Blanpied**
12:00-13:00 **Poster session**
13:00-14:30 *Lunch*

4. From short-term hazard to risk

14:30-15:00 Operational earthquake loss forecasting: framework and proof of concept (**I. Iervolino**)
15:00-15:30 Evaluating risk and providing advise for low probability-high impact events in the presence of large uncertainties: the experience of the Italian High Risk Commission, 2011-2013 (**D. Giardini**)
15:30-16:00 *Coffee break*
16:00-16:30 Evaluation and public dissemination of earthquake forecasts in the United States (**M. Blanpied**)
16:30-17:30 **Panel discussion 4.** Moderator: **M. Dolce**
Reporter: **M. Gerstenberger**

TUESDAY 10 JUNE 2014

5. Decision-making process and risk communication in a low-probability forecasting environment (I)

09:00-09:30 Participatory decision making under uncertainty (**G. Woo**)
09:30-10:00 The structure and content of effective risk messages communicated to the public (**D. Mileti**)
10:00-10:30 *Coffee break*
10:30-11:00 Managing seismic sequences in Italy: Civil Protection current practice and questions for the future (**M. Dolce**)
11:00-12:00 **Panel discussion 5.** Moderator: **W. Marzocchi**
Reporter: **T. Sellnow**
12:00-13:00 **Poster session**
13:00-14:30 *Lunch*

6. Decision-making process and risk communication in a low-probability forecasting environment (II)

14:30-15:00 Case histories of communicating uncertain earthquake hazard & loss estimates (**D. Wald**)
15:00-15:30 Risk communication strategies when you understand that

- your audience is about as smart as you are (**T. Patt**)
- 15:30-16:00 *Coffee break*
- 16:00-16:30 Strategies for communicating science-based messages in times of uncertainty (**T. Sellnow and D. Sellnow**)
- 16:30-17:30 **Panel discussion 6.** Moderator: **D. Mileti** Reporter: **G. Woo**

WEDNESDAY 11 JUNE 2014

7. Summary of the meeting

- 09:00-10:30 Summary of the reporters
- 10:30-11:00 *Coffee break*
- 11:00-12:00 Final discussion of the executive summary and special volume
- 12:30-14:30 *Lunch*
- 14:30 End of the meeting

Posters session

- *A short-term earthquake forecasting experiment in Japan* (**Naoshi Hirata**)
- *CORSSA: community online resource for statistical seismicity analysis* (**Zechar Jeremy**)
- *Effect of data quality on a hybrid Coulomb/STEP model for earthquake forecasting* (**Stear Sandy**)
- *Towards adaptive short-term portfolio risk assessment* (**Jalayer Fatemeh**)
- *Practice and Enlightenment of earthquake prediction in China* (**Xiadong Zhang**)
- *An Operational Earthquake Forecasting System in Metropolitan Area around Beijing, China* (**Yongxian Zhang**)
- *Evaluating earthquake predictions by using the gambling score* (**Zhuang Jianchang**)
- *Short-term forecasting and preparation of earthquakes* (**Albarello Dario**)
- *Preparing for an operational earthquake forecast experiment in Iceland* (**Panzer Francesco**)
- *Improving earthquake and aftershock risk communication: lessons from the Canterbury Earthquakes, New Zealand* (**Sally Potter**)
- *The effect of including aftershocks in probabilistic seismic hazard assessment modelling: A case study for Wellington* (**Christophersen Annemarie**)

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