Earthquakes: from Mechanics to Mitigation

New Advances in Geophysics 2014
Geological Society, Burlington House, Piccadilly, London
13th & 14th February 2014
Please register at: http://tinyurl.com/eqs2014
Thursday 13th February 2014

09.30  Registration and Coffee

10.00  Introduction

1. Earthquake Processes

10.05  Emily Brodsky (University of California, Santa Cruz)
       Stress on faults

10.50  Giulio di Toro (University of Padua)
       Frictional processes and earthquakes

11.20  Sylvain Barbot (Earth Observatory of Singapore)
       Realistic forecasts of seismicity: lessons from 50 years of observations at Parkfield

11.50  Yuri Fialko (University of California, San Diego)
       Evolution of fault zones: Integrating field and laboratory observations with numerical models

12.20  Lunch

2. Defining the Hazard

13.20  Jean-François Ritz (Geosciences Montpellier - CNRS/UM2)
       Determining the slip rate, the age and size of earthquakes along major active faults: examples from Mongolia and Bhutan

13.50  Richard Walker (University of Oxford)
       Large magnitude earthquakes on slow-moving faults: examples from the history and prehistory of SE Kazakhstan

14.20  Richard Walters (University of Leeds)
       How fast is strain accumulating across faults? Towards a global strain-rate map from InSAR and GPS

14.50  John Elliott (University of Oxford)
       Seismic hazard before and after recent continental earthquakes

15.20  Break

3. Quantifying the Hazard 1

15.50  Peter Stafford (Imperial College)
       Recent developments in empirical ground motion modelling

16.20  Andreas Rietbrock (University of Liverpool)
       From weak to strong: How can weak motion data help to predict strong ground motion

16.50  Greg Beroza (Stanford University)
       Validating ground motion simulations

17.35  Wine and Posters
Friday 14th February 2014

4. Quantifying the Hazard 2

09.00  Marco Pagani (Global Earthquake Model)
        *Probabilistic seismic hazard: model building and hazard calculation from a GEM perspective*

09.45  Seth Stein (Northwestern University)
        *Assessing and mitigating earthquake hazards in the presence of deep uncertainty*

10.30  Break

5. Earthquake Impacts

11.00  Ziggy Lubkowski (Arup)
        *Contrasting the impact of earthquakes in developed and developing countries.*

11.30  Emily So (University of Cambridge)
        *Earthquake fatality estimation: bridging the physical and social sciences*

12.00  David Alexander (University College London)
        *Social, cultural and political aspects of earthquake disaster mitigation*

12.30  Lunch

6. Mitigating Earthquake Hazard

3.30   Polat Gulkan (Çankaya University, Ankara)
        *Istanbul at the threshold: Mitigating an expected earthquake*

14.10  Ruben Boroschek (University of Chile, Santiago)
        *Preparing for megaquakes at subduction zones: the Chilean infrastructure example*

14.50  Eric Calais (École Normale Supérieure, Paris)
        *Seismic risk reduction in the aftermath of the 2010 Haiti earthquake*

15.30  Conclusion