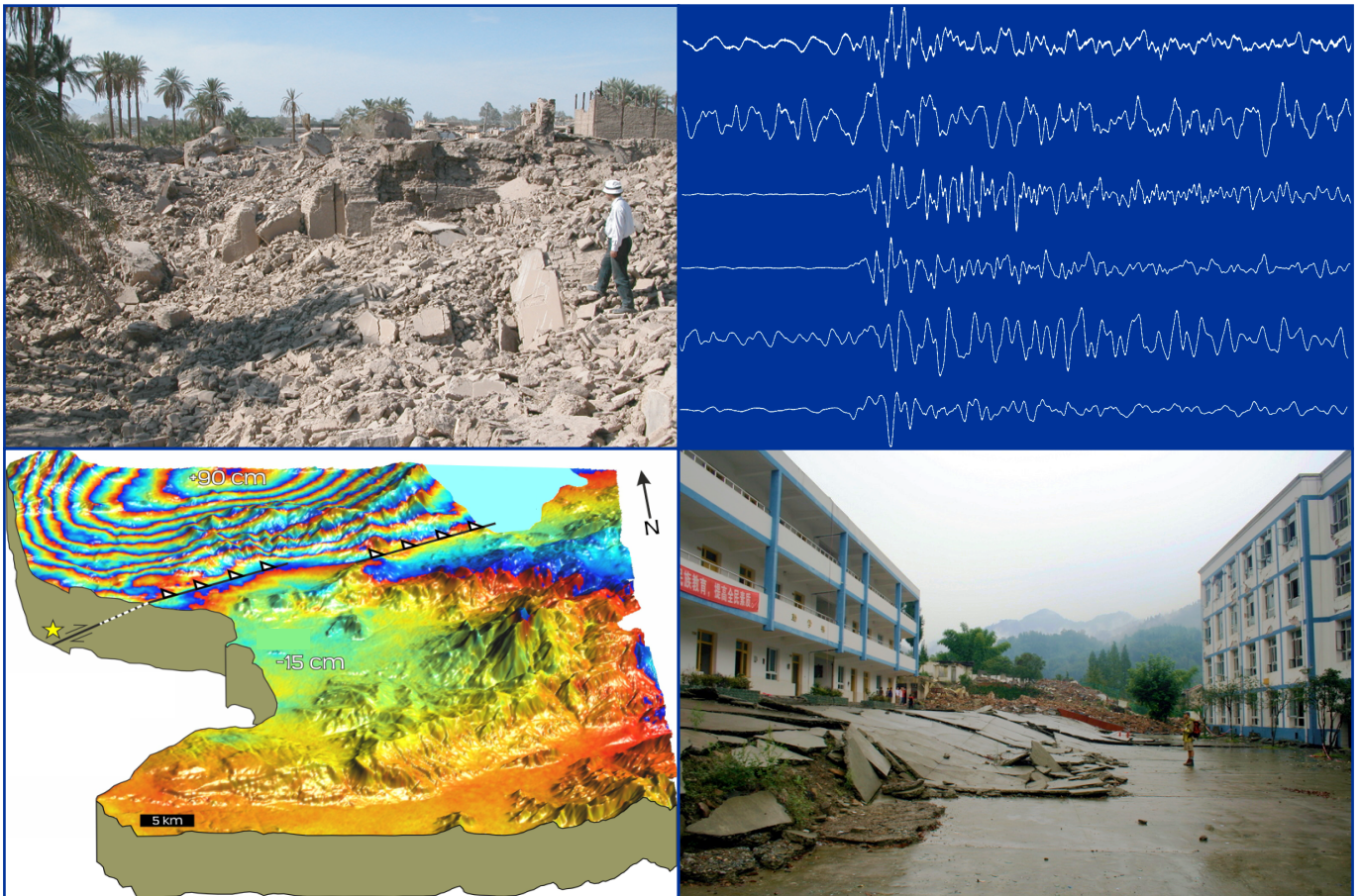


# ***Earthquakes: from Mechanics to Mitigation***

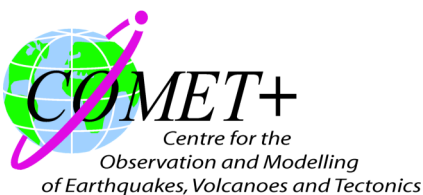


***New Advances in Geophysics 2014***

***Geological Society, Burlington House, Piccadilly, London***

***13<sup>th</sup> & 14<sup>th</sup> February 2014***

***Please register at: <http://tinyurl.com/eqs2014>***



## **Thursday 13<sup>th</sup> 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 14<sup>th</sup> 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**