

From Hooke to Helioseismology

The UK's contribution to Seismology - past, present & future









A meeting sponsored by the British Geophysical Association, the Royal Astronomical Society, the History of Physics Group of the Institute of Physics, and Shell Global Solutions International BV, to be held at College Court, University of Leicester on 9th and 10th April 2015

Organisers: Aftab Khan, Edward Davis, Stewart Fishwick, Peter Maguire (Leicester), Ian Main (Edinburgh), Mary Fowler, Carol Williams (Cambridge)

Earthquakes

Early British thinking on earthquakes from Shakespeare to Hooke

Dr Roger Musson, British Geological Survey, Edinburgh

Earthquake prediction - the Holy Grail

Professor Ian Main, Geosciences, Edinburgh

Long term slip deficit modeling and the location of high slip in future megathrust earthquakes

Professor John McCloskey, Environmental Sciences, Ulster

Quiet Earthquakes

Dr Isabelle Ryder, Earth, Ocean and Ecological Sciences, Liverpool

Instruments and Institutions

UK seismic monitoring through the decades

Dr Chris Browitt, Head of BGS Seismic Monitoring and Information Service, Edinburgh

Research on test-ban verification and the history of seismology in the UK

Dr Alan Douglas, AWRE, Aldermaston

Marine Seismics: 60 years of instrument development at Cambridge

Tim Owen and Mel Mason, Earth Sciences, Cambridge

School seismology network development in the UK and around the world

Paul Denton, British Geological Survey, Keyworth

Controlled-Source Seismology and Crustal Studies

From Mallet to LISPB

Dr David Bamford, formerly Head of Exploration, BP; Tullow Oil; now Premier Oil

The KRISP & EAGLE projects: Crustal structure in the East African Rift

Professor Randy Keller, College of Earth and Energy, University of Oklahoma, Norman, OK, USA

Earthquakes, explosions and North Korean nuclear tests

Professor Anton Ziolkowski, Geosciences, Edinburgh

Seismic investigations of the Ocean Floor

Professor Robert White FRS, Earth Sciences, Cambridge

Reflections on BIRPS

Dr Richard Hobbs, Earth Sciences, Durham

Inversion of the full seismic wavefield, high-fidelity imaging of Chicxulub, subduction zones and active volcanoes

Professor Joanna Morgan, Earth Sciences & Engineering, Imperial College, London

Sizing up to the energy challenge; seismology and the oil and gas industry

Dr Patrick Bermingham, Exploration Chief Geophysicist, Shell International Exploration and Production

Reservoirs under stress: the microseismic response to fracture stimulation

Professor Mike Kendall, Earth Sciences, Bristol

Passive Seismology

 $To mography\ and\ the\ Outer\ Earth$

Dr Stewart Fishwick, Geology, Leicester

Imaging Upper Mantle Discontinuities

Dr Catherine Rychert, National Oceanography Centre, Southampton

Anisotropy

Dr James Wookey, Earth Sciences, Bristol

Interferometry and Seismic Noise

Prof Andrew Curtis, Geosciences, Edinburgh

Helioseismology: Revealing the Sun's internal structure and dynamics

Dr Michael J. Thompson, National Centre for Atmospheric Research, Boulder, CO, USA mology in the UK

Dr Walter Mooney, Research Seismologist and former Head of Seismology, USGS, Menlo Park, CA, USA

Participants are encouraged to submit posters on any aspect of seismology, in particular on the UK's historical contribution to the science