

Liverpool Marine Symposium 2011 - Modelling and statistical methods used in climate change and marine sciences

Monday 17th January 2011 - Nicholson Lecture Theatre

Time	Speaker	Title
09:00	-	Arrive and registration (Nicholson Lecture theatre), poster set up (Foresight Centre)
09:20	TBC	Welcome
09:30	Kevin Horsburgh (NOC)	New statistical approaches to assessing climate change – report back from the Cambridge Newton Institute
10:10	Sam Royston (NOC)	A probabilistic rule-based method of predicting storm surge
10:30	-	<i>Tea Break</i>
10:50	Svetlana Jevrejeva (NOC)	Statistical modelling of sea level response to the changes in climate forcing
11:10	Vassil Rossenov (SoES)	Assessing how North Atlantic ocean overturning varies over the last 50 years
11:30	Jonty Rougier (Bristol)	Inference using large climate simulators: HadCM3 and North American Mid-Holocene temperature anomalies
12:30	-	<i>Lunch and poster session (Foresight Centre)</i>
13:30	Matt Collins (Exeter/MetOffice)	Dealing with Model Uncertainties in Climate Projection
14:00	Matt Spencer (SoES)	Detecting change points in marine time series using state-space models
14:20	Matthew Baylis (Vets)	Using climate models to project the future distributions of climate-sensitive infectious diseases
14:40	Adrian Martin (NOC)	Plankton patchiness: new approaches to a centuries old puzzle
15:10	-	<i>Tea Break</i>
16:00	-	<i>Close</i>

Science of Climate Change briefing, Thursday 10 Feb 2011

Draft Timetable

15:00: Invited, UoL and NOC speakers and Bishop Kelly meet for tea/coffee/biscuits

16:00 - 16:05: Professor Jon Saunders welcomes and introduces

16:05 – 16:10: Professor Andrew Willmott introduces and chairs first session

16:10 –16:30: Andrew Miller provides Government/regional perspective (ask for title) *(Includes 5mins for questions)*

16:30 – 16:50: Professor Ric Williams – Climate variability *(Includes 5mins for questions)*

16:50 – 17:10: Professor Matthew Baylis – Climate change and health *(Includes 5mins for questions)*

17:10 – 17:30: Professor Philip Woodworth – Understanding Sea-Level Rise and Variability *(Includes 5mins for questions)*

17:30 – 17:50: Professor Tim Greenshaw – Energy needs for the UK over the next 100 years – with a review of how it may be produced. *(Includes 5mins for questions)*

17:50 – 18:00: Break for tea/coffee in foyer

18:00 – 18:05: Professor Steve Holloway introduces and chairs second session

18:05 – 18:35: Professor Sir David King – UK challenges and opportunities in a changing climate (includes 10mins for questions)

18:35 – 18:50: Bishop James provides an ethical perspective in a wider context

18:50 – 18:55: Professor Jon Saunders closes and says goodbye

18:55 – 20:00: Speakers and top invited guests retire to Victoria Gallery & Museum for buffet/refreshments and further discussion.

University research theme: Living with Environmental Change

Synopsis

The consequences of anthropogenic climate change for ecosystems, health, infrastructure, sustainability and social responses now figure among the most pressing global challenges. Research into the underlying drivers of environmental change, and its consequences for the physical and biotic world, is of utmost importance. The complex social and economic impacts of environmental change also pose major research challenges, and there are strong links to other research themes such as security and conflict, and sustainable energy. The University of Liverpool is strongly placed to take a leading role in developing the interdisciplinary approach demanded by this theme. With its affiliated partners, it has expertise in the following areas:

- The driving of environmental change, including how the oceans are warming and sea level is rising around the globe.
- Alleviating the physical impacts of climate change, including flooding, by developing sea defences, and planning and managing the coastal sector.
- Addressing the environmental impacts on the ecosystem, including the services provided by the ecosystem, and the effects on the transmission and global distributions of both human and animal diseases.
- Understanding the human involvement in, and response to, past and on-going climate change, as well as developing mitigation strategies for the future.
- Social, economic, political and mediated dimensions of climate change in Britain and internationally.

The University's distinctive contribution is strengthened by its relationship with the NERC National Oceanography Centre (NOC). The NOC in Liverpool includes the Permanent Service for Mean Sea Level, collecting sea level data around the globe, and providing storm surge models for the Meteorological Office. In addition, we have strong partnerships with the NHS and the Liverpool School of Tropical Medicine, hosting for example the NHIR Biomedical Research Centre for Microbial Diseases.

Theme champions: Ric Williams (SoES), Matthew Baylis (Vets), Douglas Baird (Archaeology) and Neil Gavin (Politics).

Planned Activities:

Wednesday 9 February, University Launch: Discussion of research theme and funding opportunities. Discussion of pump priming. Open to all.

Thursday 10 February: Outreach to civic leaders about *threats and opportunities from Climate change*. Talks by Andrew Miller MP, Sir David King, Bishop James and science presentations (Ric Williams, Matthew Baylis, Phil Woodworth and Tim Greenshaw). Invited audience.

Detailed workshops (open to all):

Monday 17 January. *Modelling and statistical methods used in climate change and marine sciences*. Outside speakers Mat Collins (Met Office/Exeter), Jonty Rougier (Bristol) and Adrian Martin (NOC, Southampton).

Two further workshops planned in the summer term

Relevance of the past climate for the present: organised by Douglas Baird (Archaeology)

Climate change and Health : organised by Matthew Baylis (Vets)