

# Hear from the people shaping our technology future

NICTA  
Victoria  
Research  
Laboratory



## Professor David Karoly

School of Earth Sciences, University of Melbourne

### INNOVATIVE ICT SOLUTIONS FOR GLOBAL CLIMATE CHANGE RESEARCH

**Abstract** Global climate models are one of the basic tools used for climate change research, for understanding the causes of observed climate changes and for projecting future climate change. They are very large and complex, physically based, mathematical models of the climate system, which require powerful ICT solutions.

This talk will address some of the innovative ICT approaches used to run and then analyse global climate model simulations. It will describe two different projects aimed at better quantifying the uncertainties in global climate model simulations. The first is the multi-model data archive available through the World Climate Research Programme Climate Model Intercomparison Project (CMIP) 3 and the plans for CMIP5. The second is the citizen science project *climateprediction.net* at the University of Oxford.

Some results from these projects will be used to answer the question “How good (or bad) are global climate models at simulating climate variability and climate change?”

**Biography** Professor David Karoly is an ARC Federation Fellow and Professor of Meteorology in the School of Earth Sciences at the University of Melbourne. He is also leader of the Climate Change theme in the Melbourne Sustainable Society Institute at the University of Melbourne. Professor Karoly is an internationally recognised expert in climate change and climate variability, including greenhouse climate change, stratospheric ozone depletion and interannual climate variations due to El Niño-Southern Oscillation. He is a member of the Science Advisory Panel of the Australian Climate Commission, the Australian government's High Level Coordination Group on climate change science and the Wentworth Group of Concerned Scientists.

**VRL Big Picture Seminar Information** [http://www.nicta.com.au/nicta\\_events/big\\_picture](http://www.nicta.com.au/nicta_events/big_picture)



#### Date

Thursday 4<sup>th</sup> August 2011

#### Agenda

Networking and Refreshments: 5-6pm

Seminar: 6-7pm

#### Venue

The Spot Basement Theatre,  
Building 110, Business & Economics,  
198 Berkeley St (corner Pelham St)  
University of Melbourne, Carlton, VIC  
(map below)

#### RSVP

Bookings are essential. Please email  
[katya.baxter@nicta.com.au](mailto:katya.baxter@nicta.com.au)

or call (03) 9035 8080

**by Tuesday 2<sup>nd</sup> August 2011**

# Big Picture Seminar Series Invitation

## Hear from the people shaping our technology future



The Spot Basement Theatre, 198 Berkeley St, Carlton