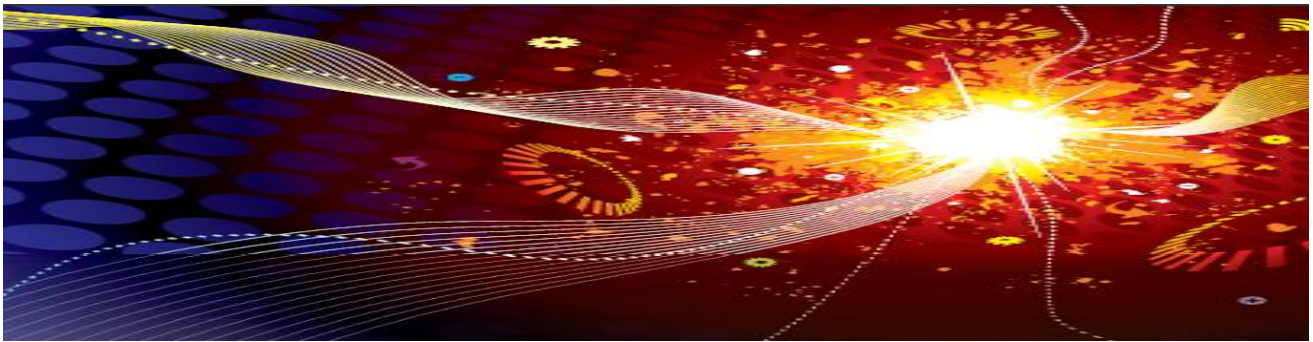

Understanding Risk: Lunchtime Seminar Series

Monday 21 October 2013 at 12:30pm

Seminar Room 2.02, Judge Business School, Trumpington St., Cambridge CB2 1AG

Lunch available

RSVP to Louise Gutteridge, Centre for Risk Studies Events and Operations Manager: l.gutteridge@jbs.cam.ac.uk



Disaster Risk Reduction and Structural Performance Criteria ***The Disconnect and its Solution***

Dr George Walker

Honorary Research Fellow at Aon Benfield

Current structural performance criteria is focussed primarily on individual building safety not on disaster risk reduction, with significant implications for its effectiveness in disaster mitigation. Whilst having been effective in stabilising deaths from building failures it has not proved as effective in mitigating the economic impact of disasters. Characteristic features of disasters not taken into account in current criteria are that they are event based not hazard based, community based not individual building based, non-linear in terms of their impact as a function of total event damage, and a function of actual age of buildings not an assumed design lifetime. Criteria focussed on disaster risk reduction would take all these into account. Determining appropriate criteria requires probabilistic cost benefit analysis over the future likely lifetime of the built environment of communities taking these factors into account. The catastrophe loss risk models and dynamic financial analysis models on which most decision making in respect of catastrophe insurance risk management is now based could be powerful tools for undertaking this analysis if modified for this purpose..



Earlier this year Dr George Walker was inducted into the Queensland Engineering Hall of Fame, citing the impact he has had during his long career as one of the leaders in the application of engineering based knowledge and methods to the management of catastrophe risk. The award cited George's "highly developed skills in research, his readiness to engage in interdisciplinary activities, and his ability to extend the findings of his research into professional practice through codes and computer based systems, and communicate this information to all levels of the community... All single family dwellings built in Australia now incorporate details which are a direct result of the recommendations he made following Cyclone Tracy and his subsequent research." Although formally retired, George continues to be actively involved in work related activities as an Honorary Research Fellow of Aon Benfield Asia Pacific, Adjunct Professor and Member of the Cyclone Testing Station Advisory Committee at James Cook University, and an Associate of Risk Frontiers at Macquarie University. His primary current research interest is the application of the insurance based modelling tools to decision making relating to adaptation to climate change, including changes in structural design codes.