



International Forum on Engineering Decision Making

Third Forum: Optimal Strategies for Disaster and Hazard Mitigation

December 12-15, 2007

Shoal Bay Resort and Spa
Port Stephens, New South Wales
Australia



<http://www.ifed.ethz.ch/>

Theme of the third IFED forum: Optimal Strategies for Disaster and Hazard Mitigation

Hazard modelling
Consequence modelling
Life-cycle cost analysis
Socio-economic impacts on decision-making
Modelling of preferences of decision-makers
Risk treatment to mitigate risks
Societal preferences in engineering decision making
Structuring complex systems using Bayesian nets and other methods
Sabotage, terrorism and man-made hazards
Implications on regulatory frameworks for decision making
Treatment/modelling of different types of uncertainties
Models for assets integrity management
Stochastic and spatial modelling of damage
Decision making involving stochastic fields
Representation of spatially distributed systems in consequence assessment

Background and motivation

The IFED forums are concerned with engineering decision-making that is based on assessments of engineering risks. The quantification of risks is an important element of risk-based decision-making, but the third IFED forum is focussed primarily on the development of strategies to manage risks in an optimal manner. In particular the forum is focussed on the development of strategies for disaster and hazard mitigation, including emerging problems associated with changes in the natural environment (including potential climate change) and the man-made environment (including risks of sabotage and terrorism).

Aim of the third IFED forum

The single-session IFED forum format brings together experts in the field of decision making, risk and reliability analysis, and probabilistic modelling who have specific interests in the themes of the forum. The objectives are:

- To outline current challenges related to disaster and hazard mitigation.
- To discuss and to present possible solutions and applications.
- To develop directions for future research in the field.

Discussion, collegiality, and dialogue are the key ingredients of a successful IFED forum. The programme of the forum provides plenty of opportunity to interact. At the end of each IFED forum a joint conclusion is formulated by all the participants in the IFED forum.

Venue and format of the third IFED forum

The third IFED forum will be held in Australia at the Shoal Bay Resort and Spa (www.shoalbayresort.com.au) located on the shores of beautiful Port Stephens. Shoal Bay is located on Australia's east coast 200 km north of Sydney, and 50 km north of Newcastle. Newcastle Airport has frequent connecting flights from Melbourne, Sydney and Brisbane. Shoal Bay is an easy 25 minute taxi ride from Newcastle Airport. The Shoal Bay Resort and Spa is located within walking distance of bayside beaches, surf beaches, bush walks and a village shopping centre.



The third IFED forum will start with a reception on Wednesday evening December 12, 2007 and end with the IFED banquet on Saturday night December 15, 2007. Thursday, Friday and Saturday morning will be devoted to presentations and discussions, and conclusions. On Saturday after lunch, an outdoor group activity and excursion will take place, followed by a reception and the IFED banquet.

The registration fee for the forum includes all lunches, all refreshment-breaks, receptions, excursions, Thursday night dinner and Saturday's banquet. The registration fee is expected to be approximately A\$500.



Notification of participation

Please indicate your interest in participating in the forum by sending a short e-mail (including name, affiliation, address, phone, fax and preliminary title or sub-theme) to ifed2007@civil.usyd.edu.au. The final programme of the conference including timetables will be available from September 2007. Accommodation details are attached, including special rates for the Forum.

Abstracts and papers

Detailed one-page abstracts of proposed papers for the forum must be submitted by June 15, 2007 to ifed2007@civil.usyd.edu.au. Invitations to present papers at the forum will be strictly based on review and acceptance of the abstracts. Notification of abstract reviews will be given in July 2007. Details of submission dates and formatting requirements for the final papers will be available then.

Full final papers will be peer reviewed and published in a conference proceedings to be made available at the IFED forum. All papers will also be available on the IFED webpage.

Special Issue: Computer-Aided Civil and Infrastructure Engineering

Following the IFED forum, authors of selected papers will be invited to submit a revised or expanded version of their IFED paper to a special issue of *Computer-Aided Civil and Infrastructure Engineering*.

IFED

IFED is an international organization with the mission to stimulate new initiatives in engineering decision making and risk analysis for engineering systems. It meets these objectives by organizing on a regular basis open international forums that focus on specific themes, providing a widely accessible publication of the contributions and of the conclusions of the forums. Detailed information can be found on the IFED website www.ifed.ethz.ch.

Two previous forums have taken place:

December 2004

Stoos (Switzerland)

Theme: Consequence Modelling in Engineering Decision Making

April 2006

Lake Louise (Canada)

Theme: Decision Making Involving Spatially Distributed Systems

Each forum has attracted over 40 participants, and selected papers appearing in special issues of *International Journal of Risk Assessment and Management* and *Civil and Environmental Engineering Systems*.

Detailed information can be found on the IFED website www.ifed.ethz.ch.

IFED consortium

Mark Stewart, University of Newcastle, Australia (current co-chair)
Stuart Reid, University of Sydney, Australia (current co-chair)
Jun Kanda, University of Tokyo, Japan (current vice-chair)
Michael Faber, ETH Zürich, Switzerland
Marc Maes, University of Calgary, Canada

IFED advisory council

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Cornell, Allin, Stanford University, USA
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Takada, Tsuyoshi, University of Tokyo, Japan
Val, Dimitri, Technion, Israel
Vrijling, Han, Technical University of Delft, the Netherlands
Zio, Enrico, Politecnico di Milano, Milano, Italy

Third International Forum on Engineering Decision Making
12/12/07 – 15/12/07

BOOKINGS

In order to book your reservation for the abovementioned event and secure accommodation please complete the form below in its entirety and return via **FAX (02) 4984 2523**. Please note group accommodation allocation will be released on **Friday 12th October 2007**. Accommodation after this date is subject to availability at the time of enquiry/booking.

ACCOMMODATION ENQUIRIES

We are happy to assist with your accommodation requirements and enquiries. Please contact **PH (02) 4984 8144**.

PAYMENT

Payment can be made by company cheque or credit card (see below). Accommodation reserved is to be paid for when making reservations. Individual bookings are not confirmed until full payment received. Please refer accommodation cancellation charges set out below.

ACCOMMODATION RATES

Please tick preferred accommodation. All accommodation rates inclusive of full buffet breakfast. Confirmation sent on receipt of payment.

Resort Poolside Studio	Sole Occupancy	\$183.00 per room per night	[]
Two Bedroom (2 Bathroom) Standard Apartment	Twin Occupancy	\$277.00 per room per night	[]
Two Bedroom (2 Bathroom) Superior Apartment	Twin Occupancy	\$313.00 per room per night	[]

ACCOMMODATION CANCELLATIONS

Accommodation cancellations incur the following penalty charges:

- 60 days prior to arrival - Nil
- 30-60 days prior to arrival - 25% of total accommodation pkg charges per cancelled room per night
- 7-30 days prior to arrival - 50% of total accommodation pkg charges per cancelled room per night
- 0-7 days prior to arrival - 100% of total accommodation pkg charges per cancelled room per night

Delegate Name: _____

Arrival Date: _____ Departure Date: _____

No. of Delegates: _____ No. of Other Adults: _____

No. of Children (3-12yrs): _____ No. of Infants (under 3yrs): _____

Contact Phone No.: _____ Mobile: _____

Email Address: _____ Fax: _____

Address: _____

State: _____ Postcode: _____

I authorise Shoal Bay Resort & Spa to debit my credit card for the full accommodation amount:

[] MASTERCARD [] VISA [] BANKCARD [] DINERS [] AMEX

CREDIT CARD NO: _____ EXP DATE: _____

CARDHOLDER SIGNATURE: _____ DATE: _____

CONDITIONS OF BOOKING AND OCCUPANCY

Please read these conditions carefully. Each registered person ("Guest") acknowledges and agrees that these conditions apply and extend to any person or persons staying or visiting Shoal Bay Resort & Spa apartments or resort facilities ("Resort"). **These conditions also extend to use of resort facilities at the invitation of or with the authority of the registered guest.**

1. **CHECK-IN:** From 2:00pm. Please register at reception before entering the Resort.
2. **CHECK-OUT:** By 10:00am. Room keys card will expire at 10:15 am. Late check-outs subject to availability and fees may apply.
3. **AQUA SPA:** Advance bookings essential for treatments at Aqua Spa. The Aqua Spa is available for guests 18 years and over and 16 years and over if accompanied by an adult.
4. **PARKING:** Complimentary guest car parking available.
5. **DAMAGES:** Guests will be responsible for any replacement and associated costs for any damage or loss to either the apartment and/or its contents of Resort property. The Guest authorises Resort management to charge the Guest credit card for any loss, damage or monetary contribution for which any Guest is liable under this document or otherwise.
6. **LEGAL REQUIREMENTS:** Apartments must not be used for any unlawful purpose. The by-laws, rules and regulations of the Resort and any reasonable direction of Resort management or their designate must be complied with. Guests may be asked to leave the apartment and Resort grounds if after a reasonable warning, guests fails to comply with the direction of Resort management.
7. **LIABILITY:** Neither the Resort, management or the apartment owner is liable for any damage or loss of property which a guest may sustain while on the Resort grounds.
8. **INSPECTIONS:** Resort management may inspect the apartment at any time with reasonable notice and at any time without notice if the Resort is of the opinion that there has been a breach of these conditions.
9. **MISREPRESENTATION:** Resort management and the apartment owner are not responsible for any misrepresentation of apartment descriptions.
10. **TERMINATION:** If the tenancy ends or is terminated, the guest must immediately vacate the apartment. The Manager is authorised to act in a reasonable manner to enforce the eviction of any Guest and removal of guest's property.