

Special Issue on Integrated Uncertainty Management for Decision Making

Co-Guest Editors

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CALL FOR PAPERS

Solving practical decision problems often requires the integration of information and knowledge derived from different sources of data and evidence, taking into account uncertainty and imprecision. The latter are often both present in many types of decision problem and may be due, for instance, a lack of information, error in measurements, human's subjective judgements, or ambiguous meanings in criteria and assessments. This gives rise to the demand for new methods and efficient techniques for managing and integrating various types of uncertainty within a coherent framework, so as to ultimately improve decision analysis in complex decision making situations. These research issues have recently received considerable attention in the research literature.

This special issue will follow the International Symposium on Integrated Uncertainty Management and Applications, which will be held in April 9–11, 2010, Ishikawa, Japan, but be also open to contributions that would not be presented in it.

We welcome submissions of papers in all aspects of integrated uncertainty management and decision making. Topics include but are not limited to:

- **Methodology:**

- Uncertainty formalisms: Bayesian probabilities, Dempster-Shafer theory, fuzzy measures, random sets, rough sets, fuzzy sets and their hybrids
- Information fusion and knowledge integration in uncertain environments
- Decision making under various types of uncertainty
- Aggregation of preferences under uncertainty
- Copulas for dependence modelling
- Optimization under soft constraints

- **Application:**

- Ranking and recommendation systems
- Supply chain management
- Kansei engineering and evaluation
- Engineering management
- Management of services
- Environmental and economics sciences
- Novel applications

Important Dates

- 30 May 2010: Submission deadline
- 30 September 2010: Notification of the first-round review
- 30 November 2010: Revised submission due
- 5 March 2011: Final notice of acceptance/reject
- 30 April 2011: Final manuscript