



## ISIPTA '11 JULY 25 – 28 2011, INNSBRUCK, AUSTRIA

ISIPTA '11: 7th International Symposium on Imprecise Probability: Theories and Applications

Monday 25 to Thursday 28 July 2011, University of Innsbruck, Innsbruck, Austria, [www.sipta.org/isipta11/](http://www.sipta.org/isipta11/).



Photos: Innsbruck Tourismus

### 3rd Announcement and Call for Posters

The ISIPTA meetings are the primary international forum to present and discuss new results on the theories and applications of imprecise probability.

Imprecise probability is a generic term for the many mathematical and statistical models and methods, allowing us to measure chance or uncertainty without the restriction of sharp probabilities. These models include lower and upper expectations or previsions, interval valued probabilities, sets of probability measures, belief functions, Choquet capacities, comparative probability orderings, possibility measures, plausibility measures, and sets of desirable gambles. Imprecise probability models are needed in inference and decision problems where the relevant information is scarce, vague or conflicting, and where preferences may be incomplete.

#### Symposium format

It is a tradition of the ISIPTA meetings that we try to avoid parallel sessions. Each accepted paper is to be presented both (i) in a plenary session, where we ask for a short introduction and sketch of the context and relevance of the paper; and (ii) in a poster session, where ample opportunity and time is given for detailed explanation and discussion.

We also invite posters without a paper to attract people who wish to present and discuss their work within the framework of the conference, for instance, for practitioners who wish to discuss possibilities for applications in their field using imprecise probabilities, or for starting students. A poster without paper can

also be an option to advertise ongoing work or to discuss challenges.

#### Submissions

**Submission of abstracts for posters is now open.**

If you wish to present a poster without paper, please submit a one-page abstract of the work you intend to present. Abstracts of accepted posters will be made available at the conference and online.

#### Important dates

**For posters without paper:**

Abstract submission deadline: **May 20 2011**

Notification of acceptance: June 10 2011

**Symposium:** July 25-28 2011

#### Themes of the symposium

The symposium is open to contributions on all aspects of imprecise probability. Topics of interest include, but are not limited to:

- models of coherent imprecise assessments
- sets of probability measures, credal sets
- interval-valued probabilities
- upper and lower expectations or previsions
- non-additive set functions, and in particular Choquet capacities (and Choquet integration), possibility measures, belief and plausibility measures

- random sets
- rough sets
- comparative probability orderings
- qualitative reasoning about uncertainty
- imprecision in utilities and expected utilities
- limit laws for imprecise probabilities
- physical models of imprecise probability
- philosophical foundations for imprecise probabilities
- psychological models for imprecision and indeterminacy in probability assessments
- elicitation techniques for imprecise probabilities
- robust statistics
- probabilistic bounding analysis
- data mining with imprecise probabilities
- dealing with missing data
- estimation and learning of imprecise probability models
- decision making with imprecise probabilities
- ambiguity aversion and economic models of imprecise probability
- uncertainty in financial markets
- game-theoretic probability
- algorithms for manipulating imprecise probabilities
- Dempster-Shafer theory
- information algebras and probabilistic argumentation systems
- probabilistic logic, propositional and first-order
- credal networks and other graphical models
- credal classification
- applications in engineering, computer science and artificial intelligence, statistics, economics, finance, management, psychology, philosophy and related fields.

### Special session Bruno de Finetti

A scientific and a historical session will be devoted to Bruno de Finetti who was born in Innsbruck in 1906.

In addition, participants are encouraged to submit contributions to the poster sessions that address/incorporate/extend de Finetti's work in the context of imprecise probability.

### Location

ISIPTA '11 will be held in Hotel Grauer Bär in Innsbruck, Austria. More information about Hotel Grauer Bär can be found on this website: [www.innsbruck-hotels.at/hotel-grauer-baer/das-hotel/](http://www.innsbruck-hotels.at/hotel-grauer-baer/das-hotel/).

### Program Committee Board

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### Local Organizing Committee

Anna Bombasaro, Thomas Fetz,  
Michael Oberguggenberger,  
Bernhard Schmelzer, Reinhard Stix

### Contact / Secretariat

If you have any questions about the symposium, please contact the local conference office.

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### Further details

For further details about registration, paper and poster submission, scientific program, social program and program committee, please consult the ISIPTA '11 web site at [www.sipta.org/isipta11/](http://www.sipta.org/isipta11/).

Details about previous ISIPTA meetings can be found at [www.sipta.org/index.php?id=cs](http://www.sipta.org/index.php?id=cs). For information about SIPTA, the international organisation responsible for organizing both the ISIPTA meetings and the SIPTA Schools on Imprecise Probabilities, please consult the SIPTA web site at [www.sipta.org](http://www.sipta.org).