# FLAIRS-30 Uncertain Reasoning Track

## Uncertain Reasoning (UR) Special Track at the 30th International FLAIRS Conference May 22-24, 2017

Marco Island, Florida, USA

(http://www.scs.carleton.ca/ur17)



#### Program committee

Mohand Saïd Allili (CA) Xiangdong An (CA) Alessandro Antonucci (CH) Ofer Arieli (IL) Pablo Barceló (CL) Christoph Beierle (DE) Salem Benferhat (FR) Alexander Dekhtvar (US) Sébastien Destercke (FR) Love Ekenberg (SE) Lluis Godo (ES) Christophe Gonzales (FR) Gabriele Kern-Isberner (DE) Benny Kimelfeld (IL) Evelina Lamma (IT) Philippe Leray (FR) Thomas Lukasiewicz (UK) Nicholas Mattei (AU) Robert Mercer (CA) Farid Nouioua (FR) Odile Papini (FR) Rafael Peñaloza (IT) Henri Prade (FR) Andrea Pugliese (IT) Babak Salimi (US) Steven Schockaert (UK) Matthias Thimm (DE) Guy Van Den Broeck (US)

#### IMPORTANT DATES

Paper submission
Nov. 21, 2016
Notification of
acceptance
Jan. 23, 2017
Camera ready paper
Feb. 27, 2017
Conference dates
May 22-24, 2017

Scope: Many problems in AI require the agent to operate with incomplete or uncertain information. The objective of the Uncertain Reasoning track is to present and discuss a broad and diverse range of current work on uncertain reasoning, including theoretical and applied research based on different paradigms. We hope that the variety and richness of this track will help to promote cross fertilization among the different approaches for uncertain reasoning, and in this way foster the development of new ideas and paradigms.

Interested authors should format their papers according to AAAI formatting guidelines. The papers should be original work and should not exceed 6 pages (4 pages for a poster) and are due by November 21, 2016. For FLAIRS-30, the 2017 conference, the reviewing is a double blind process. Papers must be submitted as PDF through the EasyChair conference system (https://easychair.org/conferences/?conf=flairs30).

**Topics of interest:** Papers on all aspects of uncertain reasoning are invited. Papers of particular interest include, but are not limited to:

- Uncertain reasoning formalisms, calculi and methodologies
- Reasoning with probability, possibility, fuzzy logic, belief function, vagueness, granularity, rough sets, and probability logics
- Modeling and reasoning using imprecise and indeterminate information, such as: Choquet capacities, comparative orderings, convex sets of measures, and intervalvalued probabilities
- Exact, approximate and qualitative uncertain reasoning
- Bayesian networks
- Graphical models of uncertainty
- Multi-agent uncertain reasoning and decision making
- Decision-theoretic planning and Markov decision process

- Temporal reasoning and uncertainty
- Nonmonotonic reasoning
- Conditional logics, Description logic, Logic programming
- Argumentation
- Belief change and Merging
- Similarity-based reasoning
- Construction of models from elicitation, data mining and knowledge discovery
- Uncertain reasoning in information retrieval, filtering, fusion, diagnosis, prediction, situation assessment
- Uncertain reasoning in data management
- Practical applications of uncertain reasoning

For next year we intend to bring closer together the areas of uncertainty management in AI and data management. We are particularly interested in submissions that can be of interest for both. The interaction of these two areas and research communities will be fruitful for the two of them, and beneficial to the broader area of data science in general.

All accepted papers will be published as FLAIRS proceedings by AAAI Press. A special issue of a journal will be devoted to extended versions of the top papers at the track

In cooperation with: A\*\* Association for the Advancement of Artificial Intelligence

FLAIRS-30 Conference http://www.flairs-30.info

Conference chair Ingrid Russell (US)

Program co-chairs Vasile Rus (US) Zdravko Markov (US)

Special Tracks Coordinator

Keith Brawner (US)

### Uncertain Reasoning Track (UR)

UR track co-chairs Leopoldo Bertossi (CA) Karim Tabia (FR)

Invited speakers
Guy Van den Broeck
(UCLA, US)

Title: Open-World Probabilistic Databases

