



Special Track on *Uncertain Reasoning*

Many problems in AI require an intelligent agent to operate with incomplete or uncertain information, for example, in reasoning, planning, learning, perception and robotics. The objective of this 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.

The Special Track on Uncertain Reasoning is the oldest track in FLAIRS conferences, running annually since 1996. This meeting at FLAIRS-27 will mark the nineteenth in the series. Like the previous tracks, the special track seeks to bring together researchers working on broad issues related to reasoning under uncertainty. Papers on all aspects of uncertain reasoning were invited. Papers of particular interest included 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 interval-valued probabilities; exact, approximate and qualitative uncertain reasoning; Bayesian networks; graphical models of uncertainty; multiagent uncertain reasoning and decision making; decision-theoretic planning and Markov decision process; temporal reasoning and uncertainty; nonmonotonic reasoning, conditional logics, argumentation, belief change and merging; similarity-based reasoning; construction of models from elicitation, data mining and knowledge discovery; practical applications of uncertain reasoning.

– Souhila Kaci (LIRMM, France)

– Matthias Thimm (Koblenz University, Germany)