



## **Special Track on** ***Uncertain Reasoning***

Many problems in AI (in reasoning, planning, learning, perception and robotics) require an agent to operate with incomplete or uncertain information. 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 will mark the 16th in the series. Like the previous tracks, this 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, probabilistic graphical models and Bayesian networks, 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; multiagent uncertain reasoning and decision making; decision-theoretic planning and Markov decision process; temporal reasoning and uncertainty; nonmonotonic and conditional logics; similarity-based reasoning; construction of models from elicitation, data mining and knowledge discovery; uncertain reasoning in information retrieval, filtering, fusion, diagnosis, prediction; and practical applications of uncertain reasoning.