Special Track on
Uncertain Reasoning

Many problems in AI require an intelligent agent to operate with incomplete or uncertain information, e.g., 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-25 will mark the seventeenth 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; graphical models of uncertainty; multiagent uncertain reasoning and decision making; decision-theoretic planning and Markov decision process; temporal reasoning and uncertainty; belief change and merging; nonmonotonic and conditional logics; similarity-based reasoning; and practical applications of uncertain reasoning.