19th International Workshop on Qualitative Reasoning (QR-05) - qr05.tugraz.at

May 18-20, 2005, Graz University of Technology, Graz, Austria

Program Committee

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Important Dates

Paper and Posters: February 14, 2005 Acceptance notification: March 31, 2005 Camera-ready copies: April 18, 2005 Registration: April 2, 2005 Workshop: May 18-20, 2005

Homepage

http://qr05.tugraz.at/



Qualitative Reasoning is an exciting research area at the interface between Cognitive Science and Artificial Intelligence that combines the quest for fundamental understanding of how people reason about physical systems with new ways to supplement conventional modeling, analysis, diagnosis, and control techniques to tackle real-world applications. The 19th edition of the workshop will be held in Graz, Austria from May 18th through May 20th, 2005.

Paper submissions are encouraged in the following research topics:

- QR and cognitive modeling (e.g., cognitive theories of reasoning about physical systems, theories and experiments concerning human reasoning and learning of mental models, QR models for spatial reasoning, cognitive maps, cognitive robots);
- QR techniques (e.g., qualitative simulation, ontologies, management of multiple models, reasoning over time and space, mathematical formalizations of QR, qualitative algebras, qualitative dynamics, qualitative kinematics, qualitative optimization);
- Task-level reasoning (e.g., design, planning, monitoring, diagnosis and repair, explanation, tutoring and training, process control and supervision);
- QR applications engineering, (e.g., engineering, education, business, biology, chemistry, ecology, economics, social science, environmental science, medicine, and law);
- QR techniques and other modeling approaches (e.g., system dynamics and bond-graphs, signal processing, numerical methods, statistical techniques, differential equations);
- Knowledge acquisition methods (e.g., model building tools and techniques, automated model construction and machine learning, acquisition of models from data).
- Theoretical foundations of qualitative reasoning techniques.

The Program Chairs are Michael Hofbaur, Bernhard Rinner, and Franz Wotawa (all of them Graz University of Technology).

Submission of Papers

- Full Paper. A PDF file of the full paper not to exceed 6000 words (excluding references) must be submitted via the workshop homepage qr05.tugraz.at (or less preferred via e-mail to qr05@ist.tugraz.at) by February 14, 2005.
- Posters. A PDF file of the poster paper not to exceed 2000 words (excluding references) must be submitted via the workshop homepage qr05.tugraz.at (or less preferred via e-mail to qr05@ist.tugraz.at) by February 14, 2005.
- Review Process. Both papers and posters will be selected according to their quality, significance, originality, and potential to generate discussion. Each contribution will be reviewed by at least two referees from the QR-2005 Program Committee.
- Submission to Conferences or Journals. The accepted papers will be published as a collection of Working papers. As QR-2005 is a workshop, not a conference, submission of the same paper to conferences or journals is acceptable.

We strongly recommend authors to format their papers according to the IJCAI 2005 guidelines. Style files are available at the IJCAI 2005 homepage. Additional Participants

People who wish to attend the workshop without submitting a paper or a poster should send a request to qr05@ist.tugraz.at.