Qualitative Reasoning – SIKS course May 2007

Literature and review suggestions

- For recent work on Garp3, including downloading software and models, consult: http://www.garp3.org
- The American Association for Artificial Intelligence (AAAI) has on their website collections of pages on AI topics. The introductory page on Qualitative Reasoning can be found at: http://www.aaai.org/AITopics/html/qual.html
- A special issue of the AI magazine was published on Qualitative Reasoning (AI Magazine, volume 24, number 4, pages 13-130, 2003). The contributions can be found at: http://www.aaai.org/Magazine/issues.php

For the SIKS-course we will focus on four articles published in this special issue:

- Current Topics in Qualitative Reasoning, Editorial Introduction by Bert Bredeweg and Peter Struss (pages 13-16).
- Model-Based Systems in the Automotive Industry, by Peter Struss and Chris Price (pages 17-34).
- Qualitative Reasoning about Population and Community Ecology, by Paulo Salles and Bert Bredeweg (pages 77-90).
- Mathematical Foundations of Qualitative Reasoning, by Louise Trave-Massuyes, Liliana Ironi, and Philippe Dague (pages 91-106).

Other contributions to this special issue are:

- Qualitative Modeling in Education, by Bert Bredeweg and Ken Forbus (pages 35-46).
- Qualitative Spatial Reasoning Extracting and Reasoning with Spatial Aggregates, by Chris Bailey-Kellogg and Feng Zhao (pages 47-60).
- Model-Based Programming of Fault-Aware Systems, by Brian C. Williams, Michel D. Ingham, Seung Chung, Paul Elliott, Michael Hofbaur, and Gregory T. Sullivan (pages 61-76).
- Learning Qualitative Models, by Ivan Bratko and Dorian Suc (pages 107-119).
- Model-Based Computing for Design and Control of Reconfigurable Systems, by Markus P. J. Fromherz, Daniel G. Bobrow, and Johan de Kleer (pages 120-130).

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