

Special Session: Rough Sets in Theory and Practice

The representation of information and modeling of information flows should lead to an increased understanding of living systems. However, as we probe more of Nature our models become more complex because what we observe is a subset of the behaviours of a cybernetic machine that has evolved many responses to a plethora of stimuli over its evolutionary history, and much information is hidden from us. Moreover, living systems have enormous redundancy and use it as a survival strategy to respond to the facts in the context of a situation.

The Rough Sets representation of information is gaining popularity in data mining and in pattern matching applications and it could assist with the construction of the data driven phenomenological models of Living Systems that aim to bring predictability and understanding to the Biosciences. Therefore, this special session in Rough Sets in Theory and Practice aims to address the following research questions:

- For which problems and practical contexts is the Rough Sets representation most beneficial?
- What is the representational ability of Rough Sets (its expressiveness) compared to that of other types of sets and what relative advantages or disadvantages does this bring for particular problem domains?
- What algorithmic and computational efficiency advantages might it enjoy?

The special session aims to determine the benefits of applying Rough Sets to real-world problems and it solicits papers in its application to Biometrics, Systems Biology, Biomedicine, Biotechnology, Medical Informatics, Robotics and all of the topics of this conference. What are the benefits of hybrid methods that combine Rough Sets with other techniques, e.g. with Genetic Algorithms and Bio-inspired algorithms?

Important Dates:

Paper Submission Deadline 25 June 2007
Advance Registration Deadline 15 August 2007
Notification of Acceptance 2 July 2007
Final Program Announced 15 September 2007

(click for [LaTeX](#) or [Word](#) style files)

Send your paper directly to the Special Session Organizer:

Dr Dominik Slezak, Infobright, Toronto, Canada

EMAIL: Dominik.Slezak@infobright.com
