Summer School 2016 on reasoning, ISC, UQAM

Final version (with updates 24/06)

June 20:
9:00 am: Official opening of the School by the principal of UQAM, Robert Proulx, and by the director of the Institute, Daphnée Simard
9:10 am: General Introduction to the School by Serge Robert (UQAM)
   The Interdisciplinary Science of Reasoning

Morning session
The Experimental Psychology of Reasoning 1
9:20 am: Introduction and chair by Henry Markovits (UQAM)

The Mental Models Approach
9:30 am: Ruth M. J. Byrne (Trinity College Dublin)
   Counterfactual Thought: From Logic to Moral Judgment
10:30 am: Break
10:45 am: Geoffrey Goodwin (University of Pennsylvania)
   How People Judge the Truth and Probability of Conditionals
11:45 am: Henry Markovits (UQAM)
   A Dual-strategy Model of Conditional Reasoning

Afternoon session
Bayesian Approaches
2:15 pm: David Over (Durham University, UK)
   Probabilistic Psychology of Reasoning
3:15 pm: David A. Lagnado (University College London)
   Bayesian Networks in Evidential Reasoning
4:15 pm Break
4:30 pm: Panel discussion with the lecturers

Evening session
7:30 pm: Keynote lecture: Neuroscience and Reasoning: Is there a Module in the Brain for Reasoning? Vinod Goel (York University)

June 21: The Experimental Psychology of Reasoning 2
Morning session
9:00 am: Introduction and chair by Henry Markovits (UQAM)

Dual or Multiple Processes of Reasoning
9:15 am: Jonathan Evans (Plymouth University, UK)
   From Dual Processes to Two Minds Theory
10:15 am: Break
10:30 am: Linden Ball (University of Central Lancashire, UK)
Dual-Reasoning Processes and the Resolution of Uncertainty: the Case of Belief Bias

11:30 am: Valerie Thompson (University of Saskatchewan)
Intuition, Metacognition and Analytic Thinking

Afternoon session
Heuristics, Biases and Development

2:00 pm: Valerie Reyna (Cornell University)
A Fuzzy Trace Theory of Risky Decision Making: Why Reasoning is More like Poetry than Logic

3:00 pm: Wim de Neys (CNRS and Université de Paris-Descartes)
Heuristic Bias and Conflict Detection: Quo Vadis Dual Process Theory?

4:00 pm: Break
4:15 pm: Panel discussion with the lecturers

June 22: The Modeling of Human Reasoning

Morning session

9:00 am: Introduction and chair by Serge Robert (UQAM)
9:15 am: Jean-François Bonnefon (Toulouse School of Economics)
Reasoning about Preferences

10:15 am: Break

10:30 am: Guy Politzer (Institut Jean Nicod, ENS, Paris)
An analogical model for deduction under uncertainty

11:30 am: Ulrich Furbach (Koblenz Universität)
Automated Reasoning for Cognitive Computing

Afternoon session

2:00 pm: Keith Stenning (University of Edinburgh)
Reasoning as a Discourse Process: Consequences for Cognition

3:00 pm: Michiel van Lambalgen (University of Amsterdam)
Reasoning as a Discourse Process: Consequences for Logic

4:00 pm: Break

4:15 pm: Terrence C. Stewart (University of Waterloo, Canada)
Reasoning with Biologically Realistic Neural Representations

5:15 pm: Panel discussion with the lecturers

June 23:

Morning session

AM: Reasoning and Epistemic Modality

9:00 am: Introduction and chair by Elizabeth Allyn Smith (UQAM)
9:15 am: Malte Willer (University of Chicago)
Reasoning with Epistemic Modals

10:15 am: Break
10:30 am: Oliver Roy (Universität Bayreuth)
   Dynamic Models of Interactive Rationality

11:30 am: Yves Bouchard (Université de Sherbrooke)
   Reasoning in Epistemic Contexts

Afternoon session
Social and Environmental Dimensions of Reasoning
2:00 pm: Introduction and chair by Serge Robert (UQAM)
2:15 pm: Paul Thagard (University of Waterloo, Canada)
   Why Reason? Inference, Reasoning and Social Communication
3:15 pm: Guillaume Beaulac (Concordia University)
   Thinking about Cognitive Environments
4:15 pm: Break
4:30 pm: Panel discussion with the lecturers

June 24:
Morning session
Linguistics, Pragmatics and Reasoning
9:00 am: Introduction and chair by Elizabeth Allyn Smith (UQAM)
9:15 am: Craige Roberts (Ohio State University)
   Constrained Practical Reasoning in Linguistic Interpretation
10:15 am: Break
10:30 am: Jonathan Ginzburg (Université de Paris-Diderot)
   The View from Dialogue: Reasoning in Spontaneous, Emotionally Charged
   Conversation
11:30 am: Matthew Stone (Rutgers University)
   Learning Cognitive Models of Meaning

Afternoon session
Reasoning and Language Acquisition
2:00 pm: Introduction and chair by Daphnée Simard (UQAM)
2:15 pm: Kristen Syrett (Rutgers University)
   Reasoning in Context in Child Language Acquisition
3:15 pm: Manne Bylund (Stockholm University)
   Learning to Think in a Second Language
4:15 pm Break
4:30 pm: Panel discussion with the lecturers

June 27: Computational Models and Cognitive Architectures
Chair by Pierre Poirier & Othalia Larue, UQAM
Morning session
9:00 am: Introduction by Sangeet Khemlani (Naval Research Laboratory, Washington, D.C.)
9:15 am: Sangeet Khemlani (Naval Research Laboratory, Washington, D.C.)
   mReasoner: A Computational Model of the Processes of Inference

10:15 am: Break

10:30 am: Ron Sun (Rensselaer Polytechnic Institute, Troy, New York)
   Reasoning with the CLARION Cognitive Architecture

11:30 am: Noah D. Goodman (Stanford University)
   Bayesian Models of Reasoning and Language Understanding

Afternoon session

2:00 pm: Jennifer Trueblood (Vanderbilt University)
   A Quantum Probability Perspective on Reasoning

3:00 pm: Panel discussion with the lecturers

June 28:
Morning session

Reasoning and Rationality

9:00 am: Introduction and chair by Jean Robillard (Télé-Université, U. du Québec)
9:15 am: Jean-Yves Béziau (Universidade Federal Rio de Janeiro)
   Can Logic Turn us More Rational?

10:15 am: Break

10:30 am: Catarina Dutilh Novaes (University of Groningen)
   The Phylogeny and Ontogeny of Deductive Reasoning: A Cultural Story

11:30 am: Marco Ragni (Freiburg Universität)
   Neuro-cognitive Models of Relational Reasoning

Afternoon session

2:00 pm: Serge Robert (UQAM)
   Between Logic and Cognition: A Computational Model of Reasoning

Reasoning, Decision and Problem Solving

3:00 pm: Introduction and chair by Roger Villemaire (UQAM)
3:15 pm: Joseph Halpern (Cornell University)
   Decision Theory with Resource-bounded Agents

4:15 pm: Break

4:30 pm: Balakrishnan Chandrasekaran (Ohio State University)
   Cognitive Architectures and Diagrammatic Reasoning

5:30 pm: Panel discussion with the lecturers

June 29:

Morning session

Reasoning, Ontologies and Planning

9:00 am: Introduction and chair by Roger Villemaire (UQAM)
9:15 am: Sheila McIlraith (University of Toronto)
   Reasoning to Act: From Logic to Automated Planning
10:15 am: Break
10:30 am: Ian Horrocks (Oxford University)
   Logic ^ Reasoning ^ Scalability |= ⊥ ?
11:30 am: Pascal Hitzler (Wright State University, Dayton, Ohio)
   Ontology Modeling

Afternoon session
Cognition and Mathematical Reasoning
2:00 pm: Introduction and chair by Elizabeth Allyn Smith (UQAM)
2:15 pm: Helen de Cruz (University of Amsterdam)
   Can Numerical Cognition Tell us Anything about the Metaphysics of Numbers?
3:15 pm: Paula Quinon (Lund University, Sweden)
   Philosophical Problems Related to the Approximate Number System
4:15 pm: Break
4:30 pm: Panel discussion with the lecturers
5:00 pm: Cocktail and poster session: organized by Janie Brisson (UQAM)

June 30:
Reasoning and Education
Morning session
9:00 am: Introduction and chair by Julien Mercier (UQAM)
9:15 am: Susanne Lajoie (McGill University)
   Learning Environments Across Disciplines
10:15 am: Break
10:30 am: Roger Azevedo (North Carolina State University)
   Interdisciplinary Fusion: Reasoning about Cognitive, Metacognitive, and Affective Processes used during Complex Learning with Advanced Learning Technologies
11:30 am: Jeroen J. G. van Merrienboer (Maastricht University)
   Cognitive Basis for the Design of Instruction

Afternoon session
2:00 pm: Tassos. A. Mikropoulos (University of Ioannina, Greece)
   Educational Virtual Environments: Turning Affordances into Pedagogical Features through Reasoning
3:00 pm: Ton De Jong (University of Twente, Netherlands)
   Reasoning and Learning: Technological Solutions for Potential Pitfalls in Inquiry Learning
4:00 pm: Break
4:15 pm: Panel discussion with the lecturers

July 1st:
Reasoning and Intelligent Tutoring Systems

Morning session

9:00 am: Introduction and chair by Roger Nkambou (UQAM)
9:15 am: Janet L. Kolodner (Georgia Tech. & The Concord Consortium, Concord MA)
Cognitive Prosthetics for Fostering Learning: A View from the Learning Sciences

10:15 am: Break

10:30 am: Beverly Woolf (University of Massachusetts, Amherst)
Detecting and Responding to Student Emotion within an Online Tutor

11:30 am: Monique Grandbastien (Université de Lorraine)
Reasoning at the Core of ITS: Stabilities and Evolutions

Afternoon session

2:00 pm: Cristina Conati (University of British Columbia)
Representation and Reasoning for Intelligent Tutoring beyond Problem Solving

3:00 pm: Roger Nkambou & Serge Robert (UQAM)
Muse Logic: An Intelligent Tutoring System for the Teaching of Logic

4:00 pm: Break

4:15 pm: Panel discussion with the lecturers

4:45 pm: General conclusion: Serge Robert (UQAM)
On the Future of the Interdisciplinary Science of Reasoning