

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 \wedge Reasoning \wedge Scalability $\models \perp$?

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 Merriënboer (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