



Programme

Philosophy and Theory of Artificial Intelligence

St Antony's College, 62 Woodstock Road, Oxford, OX2 6JF, UK

Saturday, 21.09.2013

Registration I - Nissan Lecture Theatre, Foyer

9:00 Introduction

9:00-10:30 Keynote: Stuart J Russell (UC Berkeley)

"Rationality and Intelligence"

(Nissan Lecture Theatre) Chair: Müller

10:30-11:00 Coffee break (Buttery) & Registration II

11:00-13:30 Sections (5 x 2)

	Session A: Computing (Nissan Lecture Theatre) Chair: Bonsignorio	Session B: Cognitive Science (Pavilion Room, Gateway Building) Chair: Votsis
11:00 11:30	<u>Marcin Miłkowski</u> <u>Computation and Multiple Realizability</u>	<u>Aaron Sloman</u> <u>Why is it so hard to make human-like AI mathematicians?</u>
11:30 12:00	<u>Tarek Richard Besold</u> and <u>Robert Robere</u> <u>When Thinking Never Comes to a Halt: Tractability, Kernelization and Approximability in AI</u>	<u>Mark Bickhard</u> <u>The Predictive Brain: A Critique</u>
12:00 12:30	<u>Carlos Eduardo Brito</u> and <u>Victor X. Marques</u> <u>Computation in the Enactive Paradigm for Cognitive Science and AI</u>	<u>Stefano Franchi</u> <u>General homeostasis as a challenge to autonomy</u>
12:30 13:00	<u>Blay Whitby</u> <u>Computers, Semantics, and Arbitrariness</u>	<u>Cem Bozsahin</u> <u>Natural Recursion doesn't work that way</u>
13:00 13:30	<u>David Leslie</u> <u>The Lures of Imitation and the Limitations of Practice: "Machine Intelligence" and the Ethical Grammar of Computability</u>	<u>Yoshihiro Maruyama</u> <u>AI, Quantum Information, and Semantic Realism: On the Edge between Geometric and Algebraic Intelligence</u>

13:30-15:00 **Poster Session** & **Lunch** (Buttery)

Barkati & Rousseaux · Bello · Bianchini · Boltuč · Bonsignorio · Dewhurst · Freed · Gaudl · Hempinstall · Hodges · Laukyte

Novikova, Gaudl, Bryson & Watts · Schroeder · Shieber · Smith · Toivakainen · Toy · Vadnais · Weber · Vosgerau



15:00-16:00 Keynote: Jean-Christophe Baillie (CSO, Aldebaran Robotics, Paris)

"AI: The Point of View of Developmental Robotics"

(Nissan Lecture Theatre) Chair: Shieber

16:00-17:00 Keynote: Selmer Bringsjord (Rensselaer Polytechnic Institute, Troy, NY)

"What Does Watson 2.0 Tell Us About the Philosophy & Theory of AI?"

(Nissan Lecture Theatre) Chair: Shieber

17:00-17:30 Poster Session & Coffee break (Buttery)

Barkati & Rousseaux · Bello · Bianchini · Boltuč · Bonsignorio · Dewhurst · Freed · Gaudl · Hempinstall · Hodges · Laukyte

Novikova, Gaudl, Bryson & Watts · Schroeder · Shieber · Smith · Toivakainen · Toy · Vadnais · Weber · Vosgerau

17:30-19:00 Sections (3 x 2)

	Session A: Information (Nissan Lecture Theatre) Chair: Boltuč	Session B: Modelling (Pavilion Room, Gateway Building) Chair: Bickard
17:30 18:00	<u>Anderson De Araújo</u> <u>Semantic information and artificial intelligence</u>	<u>Richard Evans</u> <u>Computer Models of Constitutive Social Practices</u>
18:00 18:30	<u>Gordana Dodig Crnkovic</u> <u>Information, Computation, Cognition. Agency-based Hierarchies of Levels</u>	<u>Bruce Toy</u> <u>Behavior Models, an Architectural Analysis</u>
18:30 19:00	<u>Ana-Maria Olteteanu</u> <u>From Simple Machines to Eureka in Four Not-So-Easy Steps. Towards Creative Visuospatial Intelligence</u>	<u>Remco Heesen</u> <u>Interaction Networks With Imperfect Information</u>

19:00-20:00 Keynote: Theodore Berger (University of Southern California, L.A.)

"Engineering Memories: A Cognitive Neural Prosthesis for Restoring and Enhancing Memory Function"

(Nissan Lecture Theatre) Chair: Bishop

20:00-22:00 Conference Dinner, St Antony's College Hall (pre-bookings online)



Programme

Philosophy and Theory of Artificial Intelligence

St Antony's College, 62 Woodstock Road, Oxford, OX2 6JF, UK

Sunday, 22.09.2013

9:00-10:00 Keynote: Murray Shanahan (Imperial College, London)

"Consciousness, Artificial Intelligence, and the Frame Problem"

(Nissan Lecture Theatre) Chair: Scheutz

10:00-11:00 Keynote: Michael Wheeler (University of Stirling, Scotland)

"AI and Extended Cognition"

(Nissan Lecture Theatre) Chair: Scheutz

11:00-11:30 Coffee break (Buttery)

11:30-13:30 Sections (4 x 2)

	Session A: Morals (Nissan Lecture Theatre) Chair: Sandberg	Session B: Embodied Cognition (Pavilion Room, Gateway Building) Chair: Miłkowski
11:30 12:00	<u>Matthias Scheutz</u> <u>The need for moral competency in autonomous agent architectures</u>	<u>Elena Spitzer</u> <u>Tacit Representations and Artificial Intelligence: Hidden Lessons from an Embodied Perspective on Cognition</u>
12:00 12:30	<u>Vincent C. Müller</u> (co-author <u>Nick Bostrom</u>) <u>Future Progress in Artificial Intelligence: A Poll Among Experts</u>	<u>Carlos Herrera and Ricardo Sanz</u> <u>Heideggerian AI and the being of robots</u>
12:30 13:00	<u>Marcello Guarini</u> and <u>Jordan Benko</u> <u>Order Effects, Moral Cognition, and Intelligence</u>	<u>Madeleine Ransom</u> <u>Why Emotions Do Not Solve the Frame Problem</u>
13:00 13:30	<u>Miles Brundage</u> <u>Artificial Intelligence and Responsible Innovation</u>	<u>Robin Zebrowski</u> <u>The Machine Uprising Has Been Delayed (Again): Extended Mind Theories as A(nother) Challenge to Artificial Intelligence</u>

13:30-14:30 Lunch (Buttery)



14:30-15:30 Keynote: Luciano Floridi (University of Oxford)

"Enveloping the World - How Reality Is Becoming AI-Friendly"

(Nissan Lecture Theatre) Chair: Shagrir

15:30-18:00 Sections (5 x 2)

	Session A: Intelligence & Reasoning (Nissan Lecture Theatre) Chair: Bryson	Session B: Embodied Cognition (Pavilion Room, Gateway Building) Chair: Nasuto
15:30 16:00	<u>Ioannis Votsis</u> <u>Science with Artificially Intelligent Agents: The Case of Gerrymandered Hypotheses</u>	<u>Adam Linson</u> <u>The Expressive Stance: Intentionality, Expression, and Machine Art</u>
16:00 16:30	<u>David Davenport</u> <u>Explaining Everything</u>	<u>Alex Tillas</u> and <u>Gottfried Vosgerau</u> <u>Perception, Action & the Notion of Grounding</u>
16:30 17:00	<u>Sjur Kristoffer Dyrkolbotn</u> and <u>Truls Pedersen</u> <u>Arguably argumentative: A formal approach to the argumentative theory of reason</u>	<u>Massimiliano Cappuccio</u> <u>The Seminal Speculation of a Precursor: Elements of Embodied Cognition and Situated AI in Alan Turing</u>
17:00 17:30	<u>Ron Chrisley</u> <u>The appearance of robot consciousness</u>	<u>J. Mark Bishop</u>, <u>Slawomir J. Nasuto</u>, <u>Matthew Spencer</u>, <u>Etienne Roesch</u> and <u>Tomas Tanay</u> <u>Playing HeX with Aunt Hilary: games with an anthill</u>
17:30 18:00	<u>Tijn Van Der Zant</u> and <u>Bart Verheij</u> <u>Elephants don't fly; and they know it!</u>	<u>Brian Cantwell Smith</u> <u>Computation's Lost Promise</u>

18:00-18:30 Coffee break (Buttery)

18:30-20:00 Keynote: Daniel C. Dennett (Tufts University, Boston)

"If brains are computers, what kind of computers are they?"

(Nissan Lecture Theatre) Chair: Müller