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Doctoral Symposium

Sunday, 10 May – Full day

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Doctoral Symposium
Room Amsterdam

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T3 – Agent-mediated Electronic Negotiation
Room Brussels

Sunday, 10 May – Half day / afternoon

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T4 – Complex Negotiations for Intractable Problems
Room Brussels

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T6 – Cooperative Games in Multi-Agent Systems
Room Rome

T7 – Decision Making in Extended Multiagent Interactions
Room Strasbourg

T9 – Programming Languages and Development Tools for Multi-Agent Systems
Room Luxembourg

T13 – Agent-Oriented Modelling and Software Engineering
Room Zurich

T17 – Reinforcement Learning and Beyond ***(continues on 11 May afternoon)***
Room Rege II

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T5 – Automated Mechanism Design: Methods and Applications
Room Rege II

Monday, 11 May – Half day / afternoon

14.00 – 15.30 / 16.00 – 17.30

T8 – Graphical Models for Multi-Agent Decision-making
Room Rege II

T17 – Reinforcement Learning and Beyond ***(continuation from 10 May)***
Room Luxembourg

Coffee Breaks: 10.30 – 11.00 / 15.30 – 16.00
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Room Maastricht

Monday, 11 May – Half day / afternoon

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W3 – Programming Multi-Agent Systems (ProMAS) ***(continues on 12 May)***
Room Maastricht

Monday, 11 May – Full day

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W1 – Agent Oriented Software Engineering (AOSE)
Room Rege I

W4 – Agents and Data Mining Interaction (ADMI)
Room Madrid (Hotel Budapest)

W5 – Service-Oriented Computing: Agents, Semantics, and Engineering (SOCASE)
Room Buda (Hotel Budapest)

W6 – Trust in Agent Societies
Room Amsterdam

W8 – Multi-Agent Based Simulation (MABS) ***(continues on 12 May morning)***
Room Nice

W10 – Agents for Games and Simulation (AGS)
Room Strasbourg

W11 – Optimization in MAS (OptMAS)
Room Copenhagen

W12 – Mixed-Initiative MAS
Room Zurich

Coffee Breaks: 10.30 – 11.00 / 15.30 – 16.00
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W18 – Declarative Agent Languages and Technologies (DALT)
Room Brussels

W19 – Multi-Agent Sequential Decision Making in Uncertain Domains (MSDM)
Room Rome

Tuesday, 12 May – Half day / morning

09.00 – 10.30 / 11.00 – 12.30

W8 – Multi-Agent Based Simulation (MABS) ***(continuation from 11 May)***
Room Nice

W20 – Empathic Agents
Room Zurich

Tuesday, 12 May – Half day / afternoon

14.00 – 15.30 / 16.00 – 17.30

W14 – Emergent Intelligence of Networked Agents (WEIN)
Room Zurich

W16 – Towards a Standard Markup Language for Embodied Dialogue Acts
Room Nice

Tuesday, 12 May – Full day

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W2 – Agent-based Technologies and applications for enterprise interOPerability (ATOP)
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W3 – Programming Multi-Agent Systems (ProMAS) ***(continuation from 11 May)***
Room Maastricht

W7 – Argumentation in Multi-Agent Systems (ArgMAS)
Room Rome

W9 – Coordination, Organization, Institutions and Norms (COIN)
Room Rege I

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W13 – Adaptive Learning Agents (ALA)
Room Strasbourg

W17/W15 – Workshop on Educational Uses of Multi-Agent Systems (EduMAS)
Room Madrid (Hotel Budapest)

W21 – Massively Multi-Agent Systems: Models, Methods and Tools (MMAS)
Room Luxembourg

W23 – Agent Technology for Sensor Networks (ATSN)
Room Amsterdam

W25 – Agent-based Complex Automated Negotiations (ACAN)
Room Rege II

W26 – Agent Design: Advancing from Practice to Theory (ADAPT)
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W27 – Agent-Mediated Electronic Commerce (AMEC)
Room Brussels

Coffee Breaks: 10.30 – 11.00 / 15.30 – 16.00
Lunch: 12.30 – 14.00

Technical Sessions Details

The posters of the full papers are presented on the Ground Level Foyer and are marked by the numbers in brackets after the titles.

WEDNESDAY, 13 MAY

08.30 – 09.00 **Opening**
Room Copenhagen Chairs: Cristiano Castelfranchi and Carles Sierra

09.00 – 11.00 **Session 1 – Multi-Robotics**
Room Copenhagen Chair: Peter Stone

Context-Aware Multi-Stage Routing (1)
Adriaan ter Mors, Jeroen van Belle, Cees Witteveen

Leader-Follower Strategies for Robotic Patrolling in Environments with Arbitrary Topology (2)
Nicola Basilico, Nicola Gatti, Francesco Amigoni

To Flock or Not to Flock: Pros and Cons of Flocking in Long-Range "Migration" of Mobile Robot Swarms (3)
Fatih Gokce, Erol Sahin

On Fast Exploration in 2D and 3D Terrains with Multiple Robots (4)
Rahul Sawhney, Madhava Krishna, Srinathan Kannan

Of Robot Ants and Elephants (5)
Asaf Shiloni, Noa Agmon, Gal Kaminka

Towards Multi-Level Modeling of Self-Assembling Micro-Robots (6)
Grégory Mermoud, Juergen Brugger, Alcherio Martinoli

09.00 – 11.00 **Session 2 – Multi-Agent Programming Languages**
Room Rome Chair: Amal El Fallah Seghrouchni

Dynamic Specifications of Open Agent Systems (7)
Alexander Artikis

Code Patterns for Agent Oriented Programming (8)
Peter Novak, Wojtek Jamroga

Combining Fault Injection and Model Checking to Verify Fault Tolerance in Multi-Agent Systems (9)
Jonathan Ezekiel, Alessio Lomuscio

Programming Open Multi-Agent Systems (10)
Nick Tinnemeier, Mehdi Dastani, John-Jules Meyer

Operational Semantics of Goal Models in Adaptive Agents (11)
Mirko Morandini, Loris Penserini, Anna Perini

Agent Programming with Temporally Extended Goals (12)
Koen Hindriks, Wiebe van der Hoek, Birna van Riemsdijk

09.00 – 11.00 **Session 3 – Norms and Normative Behaviour**
Room Brussels Chair: Pablo Noriega

Power in Normative Systems (13)
Thomas Ågotnes, Wiebe van der Hoek, Moshe Tennenholtz, Michael Wooldridge

A Framework for Monitoring Agent-Based Normative Systems (14)
Sanjay Modgil, Noura Faci, Felipe Meneguzzi, Nir Oren, Simon Miles, Michael Luck

Automated Norm Synthesis in an Agent-based Planning Environment (15)
George Christelis, Michael Rovatsos

Normative Framework for Normative System Change (16)
Guido Boella, Gabriella Pigozzi, Leon van der Torre

Norm-Based Behaviour Modification in BDI Agents (17)
Felipe Meneguzzi, Michael Luck

09.00 – 11.00 **Session 4 – Economic Approaches I**
Room Nice Chair: Makoto Yokoo

Boolean Combinations of Weighted Voting Systems (18)
Piotr Faliszewski, Edith Elkind, Michael Wooldridge

Modeling Billiards Games (19)
Christopher Archibald, Yoav Shoham

Combinatorial Prediction Markets for Event Hierarchies (20)
Mingyu Guo, David Pennock

Computational Aspects of Shapley's Saddles (21)
Felix Brandt, Markus Brill, Felix Fischer, Paul Harrenstein

A Unified Theory of Aggregation (22)
Davide Grossi

On the Complexity of Schedule Control Problems for Knockout Tournaments (23)
Thuc Vu, Alon Altman, Yoav Shoham

09.00 – 11.00 **Session 5 – Virtual Agents I**
Room Maastricht Chair: Catholijn Jonker

Culture-specific Communication Management for Virtual Agents (24)
Birgit Endrass, Matthias Rehm, Elisabeth Andre

Learning a Model of Speaker Head Nods Using Gesture Corpora (25)
Jina Lee, Stacy Marsella

A Virtual Laboratory for Studying Long-Term Relationships between Humans and Virtual Agents (26)
Timothy Bickmore, Daniel Schulman

Using Rituals to Express Cultural Differences in Synthetic Characters (27)
Samuel Mascarenhas, Joao Dias, Nuno Afonso, Sibylle Enz, Ana Paiva

Emotional Input for Character-based Interactive Storytelling (28)
Marc Cavazza, David Pizzi, Fred Charles, Thurid Vogt , Elisabeth Andre

Real-Time Expressive Gaze Animation for Virtual Humans (29)
Marcus Thiebaux, Brent Lance, Stacy Marsella

09.00 – 11.00 **Session 6 – Coalitions**
Room Amsterdam Chair: Milind Tambe

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Georgios Chalkiadakis, Edith Elkind, Maria Polukarov, Nick Jennings

False Name Manipulations in Weighted Voting Games: Splitting, Merging and Annexation (31)
Haris Aziz, Mike Paterson

Hedonic Coalition Nets (32)
Edith Elkind, Michael Wooldridge

Description Logic for Coalitions (33)
Inanc Seylan, Wojtek Jamroga

Easy and Hard Coalition Formation Problems - Parameterized Complexity Analysis (34)
Tammar Shrot, Yonatan Aumann, Sarit Kraus

A Memetic Framework for Describing and Simulating Spatial Prisoner's Dilemma with Coalition Formation (35)
Juan Carlos Burguillo-Rial

11.00 – 11.30 *Coffee break*

11.30 – 12.30 **Keynote Lecture**
Room Copenhagen ***ACM/SIGART Autonomous Agents Research Award 2009***
Chair: Sarit Kraus

Teams of Intelligent Robots: Planning and Learning with Skills, Tactics, and Plays
Manuela Veloso
Carnegie Mellon University (USA)

12.30 – 14.00 *Lunch*

14.00 – 15.30 **Panel**
Room Copenhagen Chair: Keith Decker

Agent Oriented Methodologies and Programming Languages: Towards Practical Systems

Participants:
Klaus Fischer *(DKKI, Germany)*
Andrea Omicini *(University of Bologna, Italy)*
Amal El Fallah Seghrouchni *(University Paris VI, France)*
Milind Tambe *(University of Southern California, USA)*

15.30 – 16.00 *Coffee break*

16.00 – 19.00 **Poster Session**
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"Blue △" Session:	17.00 – 18.00
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Latek Maciej, Rob Axtell, Bogumil Kaminski

Adaptive Learning in Complex Evolving Trade Networks (38)
Tomas Klos, Bart Nooteboom

A Mathematical Analysis of Collective Cognitive Convergence (39)
Van Parunak

Emergent Service Provisioning and Demand Estimation through Self-Organizing Agent Communities (40)
Mariusz Jacyno, Seth Bullock, Michael Luck, Terry Payne

Effective Tag Mechanisms for Evolving Cooperation (41)
Matthew Matlock, Sandip Sen

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David Mobach, Pieterjan Fioole, Erwin Abbink, Leo Kroon, Eddy van der Heijden, Niek Wijngaards

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Cu Nguyen, Simon Miles, Anna Perini, Paolo Tonella, Mark Harman, Michael Luck

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David Lillis, Rem Collier, Dragone Mauro, Gregory O'Hare

Stable Multi-Project Scheduling of Airport Ground Handling Services with Heterogeneous Agents (46)
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Kumar Akshat, Shlomo Zilberstein

Point-Based Incremental Pruning Heuristic for Solving Finite-Horizon DEC-POMDPs (48)
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Lossless Clustering of Histories in Decentralized POMDPs (49)
Frans Oliehoek, Shimon Whiteson, Matthijs Spaan

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Michael James, Satinder Singh

Achieving Goals in Decentralized POMDPs (51)
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Klaus G. Troitzsch
Universität Koblenz-Landau, Germany

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14.00 – 15.30 **Panel**
Room Copenhagen Chair: Jaime Sichman

Theoretical Foundations for Agents and MAS: Is Game Theory Sufficient?

Participants:
Rosaria Conte *(ISTC, Italy)*
Jacques Ferber *(University of Montpellier, France)*
Wiebe van der Hoek *(University of Liverpool, UK)*
Jeffrey Rosenschein *(Hebrew University of Jerusalem, Israel)*

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Decentralised Dynamic Task Allocation: A Practical Game-Theoretic Approach (90)
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Hebrew University of Jerusalem, Israel

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Room Rome Chair: Jeremy Pitt

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Katsutoshi Hirayama, Toshihiro Matsui, Makoto Yokoo

An Analysis of Feasible Solutions for Multi-Issue Negotiation Involving Nonlinear Utility Functions (123)
Shaheen Fatima, Michael Wooldridge, Nick Jennings

Searching for Fair Joint Gains in Agent-Based Negotiation (124)
Minyi Li, Bao Vo, Ryszard Kowalczyk

Effective Bidding and Deal Identification for Negotiations in Highly Nonlinear Scenarios (125)
Ivan Marsa-Maestre, Miguel Lopez-Carmona, Juan R. Velasco

Directed Soft Arc Consistency in Pseudo-Trees (126)
Toshihiro Matsui, Marius Silaghi, Katsutoshi Hirayama, Makoto Yokoo, Hiroshi Matsuo

09.00 – 11.00 **Session 23 – Economic Approaches II/Auctions/**
Room Nice **Mechanism Design**
Chair: Mathijs de Weerdt

Learning Equilibria in Repeated Congestion Games (127)
Aviv Zohar, Moshe Tennenholtz

Team Competition (128)
Pingzhong Tang, Yoav Shoham, Fangzhen Lin

Stronger CDA Strategies through Empirical Game-Theoretic Analysis and Reinforcement Learning (129)
Julian Schvartzman, Michael Wellman

Rational Play and Rational Beliefs under Uncertainty (130)
Nils Bulling, Wojtek Jamroga

Characterizing False-Name-Proof Allocation Rules in Combinatorial Auctions (131)
Taiki Todo, Atsushi Iwasaki, Makoto Yokoo, Yuko Sakurai

User Modeling in Position Auctions: Re-Considering the GSP and VCG Mechanisms (132)
Danny Kuminov, Moshe Tennenholtz

09.00 – 11.00 **Session 24 – Agent Reasoning/Deliberation/Decision Mechanisms**
Room Brussels
Chair: Timothy Norman

Altruism and Agents: An Argumentation Based Approach to Designing Agent Decision Mechanisms (133)
Trevor Bench-Capon, Katie Atkinson, Peter McBurney

A Self-Organizing Neural Network Architecture for Intentional Planning Agents (134)
Budhitama Subagdja, Ah-Hwee Tan

Planning with Continuous Resources for Agent Teams (135)
Janusz Marecki, Milind Tambe

Bounded Practical Social Reasoning in the ESB Framework (136)
Iain Wallace, Michael Rovatsos

First Principles Planning in BDI Systems (137)
Lavindra de Silva, Sebastian Sardina, Lin Padgham

Self-Deceptive Decision Making: Normative and Descriptive Insights (138)
Jonathan Ito, David Pynadath, Stacy Marsella

09.00 – 11.00 **Session 25 – Coordination II/Resource Allocation**
Room Amsterdam
Chair: Sascha Ossowski

Resource Allocation with Answer-Set Programming (139)
Joao Leite, José Alferes, Belopeta Mito

How Similarity Helps to Efficiently Compute Kemeny Rankings (140)
Nadja Betzler, Michael Fellows, Jiong Guo, Rolf Niedermeier, Frances Rosamond

Manipulation and Gender Neutrality in Stable Marriage Procedures (141)
Francesca Rossi, Maria Silvia Pini, K. Brent Venable, Toby Walsh

Evaluating Hybrid Constraint Tightening for Scheduling Agents (142)
James Boerkoel, Edmund Durfee

Solving Multiagent Assignment Markov Decision Processes (143)
Scott Proper, Prasad Tadepalli

Computing Optimal Randomized Resource Allocations for Massive Security Games (144)
Christopher Kiekintveld, Manish Jain, Jason Tsai, James Pita, Milind Tambe, Fernando Ordonez

11.00 – 11.30 *Coffee break*

11.30 – 12.30 **Keynote Lecture**
Room Copenhagen Chair: Carles Sierra

From DPS to MAS to ...: Continuing the Trends
Michael N. Huhns
University of South Carolina (USA)

12.30 – 14.00 **Community Meeting** *(with lunch on site)*
Room Copenhagen

14:00 – 14:30 **Presentation of AAMAS10 and Closing**
Room Copenhagen Chairs: Cristiano Castelfranchi and Carles Sierra

List of Extended Abstracts

"RED ○" Session
Wednesday, 13 May, 16.00 – 17.00

R-1: A Service-Oriented Approach for Integrating Multiagent System Designs
Walamitien Oyenan, Scott DeLoach, Gurdip Singh

R-2: Social Network Semantics for Agent Communication
Guido Boella, Joris Hulstijn, Leon van der Torre

R-3: Flexible Deadlines for Directed Obligations in Agent-based Business Contracts
Henrique Lopes Cardoso, Eugenio Oliveira

R-4: Optimal Strategies in Sequential Bidding
Krzysztof Apt, Vangelis Markakis

R-5: Pick A Bundle: A Novel Bundling Strategy for Selling Multiple Items within Online Auctions
Ioannis Vetsikas, Alex Rogers, Nick Jennings

R-6: Existence and Computation of Equilibria of First-price Auctions with Integral Valuations and Bids
Guillaume Escamocher, Peter Bro Miltersen, Rocio Santillan Rodriguez

R-7: Human Behavior in Mixed Human-Agent Societies
Alicia Ruvinsky, Michael Huhns

R-8: A Socio-emotional Model of Impoliteness for Non-Player Characters
Sabrina Campano, Nicolas Sabouret

R-9: An Interface Agent for Attention Manipulation
Tibor Bosse, Rianne van Lambalgen, Peter-Paul van Maanen, Jan Treur

R-10: A General Task Specification Language for Bootstrap Learning
Ian Fasel, Michael Quinlan, Peter Stone

R-11: Humoroids-Conversational Agents That Induce Positive Emotions with Humor
Pawel Dybala, Michal Ptaszynski, Rafal Rzepka, Kenji Araki

R-12: The Cost of Stability in Weighted Voting Games
Yoram Bachrach, Reshef Meir, Michael Zuckerman, Joerg Rothe, Jeffrey Rosenschein

R-13: Constrained Coalitional Games: Formal Framework, Properties, and Complexity Results
Gianluigi Greco, Enrico Malizia, Luigi Palopoli, Francesco Scarcello

R-14: Social Influence and the Effect of Curfews
Garlick Michael, Maria Chli

R-15: Mentat: A Data-Driven Agent-Based Social Simulation of Social Values Evolution
Samer Hassan, Luis Antunes, Juan Pavón

R-16: Agent-Community-based Peer-to-Peer Information Retrieval using User Feedback and Query Learning
Tsunenori Mine, Akihiro Kogo, Satoshi Amamiya, Makoto Amamiya

R-17: Tag Based Model for Knowledge Sharing
Sharmila Savarimuthu, Maryam Purvis, Martin Purvis

R-18: Collaborative Agent-based Learning with Limited Data Exchange
Xavier Rafael Palou, Michael Rovatsos

R-19: A High Performance Agent Based Modelling Framework on Graphics Card Hardware with CUDA
Paul Richmond, Daniela Romano, Simon Coakley

R-20: MAMS Service Framework
Alexander Thiele, Thomas Konnerth, Jan Keiser, Silvan Kaiser

R-21: Learning Complementary Multiagent Behaviors: A Case Study
Shivaram Kalyanakrishnan, Peter Stone

R-22: eXtreme-Ants: Ant Based Algorithm for Task Allocation in Extreme Teams
Fernando dos Santos, Ana Bazzan

R-23: Stigmergic Reasoning over Hierarchical Task Networks
Van Parunak, Ted Belding, Robert Bisson, Sven Brueckner, Elizabeth Downs, Rainer Hilscher

R-24: Fast Winner Determination for Agent Coordination with SBB Auctions
Kenny Daniel, Sven Koenig

R-25: Agreement Spaces for Counsellor Agents
C. Carrascosa, Miguel Rebollo

R-26: Modelling the Dynamics of Multiagent Q-learning with e-greedy Exploration
Eduardo Gomes, Ryszard Kowalczyk

R-27: Learning to Cooperate in a Continuous Tragedy of the Commons
Steven De Jong, Karl Tuyls

R-28: Transferring Experience in Reinforcement Learning through Task Decomposition
Ioannis Partalas, Konstantinos Tzevanidis, Grigorios Tsoumakas, Ioannis Vlahavas

R-29: Learning Disjunctive Preferences for Negotiating Effectively
Reyhan Aydogan, Pinar Yolum

R-30: Service Oriented Multi-agent Systems: An Open Architecture
C. Carrascosa, Adriana Giret, Vicente Julian, Miguel Rebollo, Estefania Argente, Vicente Botti

R-31: Introducing Social Groups and Group Exchanges in the PopOrg Model
Antonio Costa, Graçaliz Dimuro

R-32: Assistance Layer, a Next Step in MAS Coordination Support
Jordi Campos Miralles, Marc Esteva, Maite López-Sánchez

R-33: A Communication Protocol for Semantic Heterogeneity with Incomplete Ontology Alignment
Laurent Mazuel, Nicolas Sabouret

R-34: From Agent Interaction Protocols to Executable Code: A Model-driven Approach
Christian Hahn, Ingo Zinnikus, Stefan Warwas, Klaus Fischer

R-35: Exploiting Agent Diagnosis for Plan Repair in MAS
Roberto Micalizio, Pietro Torasso

R-36: Optimal Solutions for Moving Target Search
Carsten Moldenhauer, Nathan Sturtevant

R-37: Flexible Approximation of Structured Interactions in Decentralized Markov Decision Processes
Stefan Witwicki, Edmund Durfee

R-38: Logical Formalization of Social Commitments: Application to Agent Communication Languages
Benoit Gaudou, Andreas Herzig, Dominique Longin

R-39: Goal Generation from Beliefs Based on Trust and Distrust
Célia da Costa Pereira, Andrea Tettamanzi

R-40: Mixing Behaviour-Dependent and -Independent Tactics in Multi-issue Negotiation Strategies
Jan Richter, Ryszard Kowalczyk

R-41: The Role of Assumption Identification in Autonomous Agent Reasoning
Georgios Giannikis, Aspassia Daskalopulu

R-42: Behaving Responsible in Multi-Agent Worlds
Tiago de Lima, Lamber Royakkers, Frank Dignum

"BLUE △" Session
Wednesday, 13 May, 17.00 – 18.00

B-1: Uncertainties in Adversarial Patrol
Noa Agmon, Sarit Kraus, Gal Kaminka

B-2: Online and Onboard Evolution of Robotic Behavior Using Finite State Machines
Lukas König, Sanaz Mostaghim, Hartmut Schmeck

B-3: Simulating Norm Formation – An Operational Approach
Ulf Lotzmann, Michael Moehring

B-4: A Fair Payoff Distribution for Myopic Rational Agents
Stéphane Airiau, Sandip Sen

B-5: Mechanism Design for Task Procurement with Flexible Quality of Service
Enrico Gerding, Alex Rogers, Kate Larson, Nick Jennings

B-6: Sequential Partition Mechanism for Strongly Budget-Balanced Redistribution
Yuko Sakurai, Yasumasa Saito, Atsushi Iwasaki, Makoto Yokoo

B-7: A Methodology for Developing Self-Explaining Agents for Virtual Training
Maaike Harbers, Karel Van den Bosch, John-Jules Meyer

B-8: Relation between Motivations and Personality Traits for Autonomous Virtual Humans
Etienne de Sevin

B-9: Controlled Natural Languages for Interface Agents
Tamás Mészáros, Tadeusz Dobrowiecki

B-10: Koko: Architecture and Methodology for Engineering Social Affective Applications
Sollenberger Derek, Munindar Singh

B-11: A Process-oriented Approach to Model Agent Personality
André Campos, Frank Dignum, Virginia Dignum, Alberto Signoretti, Anne Canuto, Sergio Fialho

B-12: Automated Aiding Strategies for Decentralized Planning with Interdependent Policies
Martin Kollingbaum, Joseph Giampapa, Katia Sycara, Timothy Norman, Chris Burnett, Daniele Masato

B-13: SiSMar: Social Multi-agent Based Simulation of Stock
Zahra Kodia, Lamjed Ben Said, Khaled Ghedira

B-14: Group Recognition through Social Norms
Daniel Villatoro, Jordi Sabater-Mir

B-15: A Multi-Agent System of Adaptive Production Networks
Samir Hamichi, Zahia Guessoum, Diana Mangalagiu

B-16: Effect of Information and Mobility on Violence in a Bi-communal Population
Michael Winsper, Maria Chli

B-17: Networking for Multi-agents: Beyond a Local View
Sarah Lim Choi Keung, Nathan Griffiths

B-18: Capacitated Warehouse Management in Multi Agent Environments
Alan Holland

B-19: Improving Air Traffic Management through Agent Suggestions
Agogino Adrian, Kagan Tumer

B-20: Within Epsilon of Optimal Play in the Social Learning Game
James Carr, Eric Raboin, Austin Parker, Dana Nau

B-21: Semi-Supervised Learning of User-Preferred Travel Schedules
Amrudin Agovic, Maria Gini, Arindam Banerjee

B-22: Model Based Testing for Agent Systems
Zhiyong Zhang, John Thangarajah, Lin Padgham

B-23: A Domain Engineering Process for Developing Multi-agent Systems Product Lines
Ingrid Nunes, Uirá Kulesza, Camila Nunes, Carlos José Pereira de Lucena

B-24: From Abstract Qualities to Concrete Specification using Guidance Policies
Scott Harmon, Scott DeLoach, Robby

B-25: A Complete Classification of Ethical Attitudes in Multiple Agent Systems
Matteo Cristani, Elisa Burato

B-26: On-line Coordination Among Discrete-Event Agents
Manh Tung Pham, Kiam Tian Seow

B-27: A Hybrid Approach to Solving Coarse-grained DisCSPs
David Lee, Ines Arana, Hatem Ahriz, Kit-Ying Hui

B-28: Decentralised Control of Adaptive Sampling and Routing in Wireless Visual Sensor Networks
Johnsen Kho, Long Tran-Thanh, Alex Rogers, Nick Jennings

B-29: Generalizing DPOP : Action-GDL, a New Complete Algorithm for DCOP
Meritxell Vinyals, Juan A. Rodriguez-Aguilar, Jesus Cerquides

B-30: Multi-Policy Optimization in Decentralized Autonomic Systems
Ivana Dusparic, Vinny Cahill

B-31: Learning with Whom to Communicate Using Relational Reinforcement Learning
Marc Ponsen, Tom Croonenborghs, Karl Tuyls, Jan Ramon, Kurt Driessens

B-32: Improvement of The Performance Using Received Message on Learning of Communication Codes
Tatsuya Kasai, Hayato Kobayashi, Ayumi Shinohara

B-33: Online Monitoring of Social Expectations in Second Life
Stephen Cranefield, Guannan Li

B-34: The Design of Convivial Multiagent Systems
Patrice Caire, Leon van der Torre

B-35: Dynamics in Argumentation with Single Extensions
Guido Boella, Souhila Kaci, Leon van der Torre

B-36: Verifying Realizability and Reachability in Recursive Interaction Protocol Specifications
Hywel Dunn-Davies, Jim Cunningham

B-37: Applying Ontology Modularization to Argumentation over Ontology Correspondences in MAS
Paul Doran, Valentina Tamma, Ignazio Palmisano, Terry Payne

B-38: Compact Approximations of Mixture Distributions for State Estimation in Multiagent Settings
Prashant Doshi

B-39: Stability Oriented Task-Structure Based Multi-Agent RePlanning
Li Jin, Keith Decker

B-40: Theoretic Study of Distributed Graph Planning
Jianfeng Zhang, Bao Vo, Ryszard Kowalczyk

B-41: Accelerated A* Path Planning
David Sislak, Premysl Volf, Michal Pechoucek

B-42: Managing the Operations of Multiagent Virtual Organizations
Shelley Zhang, Ping Xuan, Bhumit Patel

B-43: Using Opponent Model for Efficient Negotiation
Koen Hindriks, Catholijn Jonker, Dmytro Tykhonov

B-44: Know-How for Motivated BDI Agents
Matthias Thimm, Patrick Krümpelmann

B-45: Metareasoning-Based Adaptation of Agent Classification Knowledge
Joshua Jones, Ashok Goel

"GREEN □" Session
Wednesday, 13 May, 18.00 – 19.00

G-1: Adaptive Game-Theoretic Multi-Robot Coordination Based on Resource Spending Velocity
Dan Erusalimchik, Gal Kaminka, Sarit Kraus

G-2: Grammar-Based Robot Control
Richard Kelley, Monica Nicolescu, Mircea Nicolescu

G-3: Choreographies for Agents
Lacramioara Astefanoaei, Frank S. de Boer, Mehdi Dastani

G-4: An Adaptive Bidding Strategy for Combinatorial Auctions-Based Resource Allocation in Dynamic Markets
Sui Xin, Leung Ho Fung

G-5: Multi-Attribute Preference Logic
Koen Hindriks, Catholijn Jonker, Wietske Visser

G-6: MMOG based on MAS: The MMOG Layer
Gustavo Aranda, C. Carrascosa, Vicente Botti

G-7: The Effects of Cooperative Agent Behavior on Human Cooperativeness
Arlette van Wissen, Jurriaan van Diggelen, Virginia Dignum

G-8: Intelligent Agents Helping Humans Become Successfully Intelligent
Debbie Richards, Meredith Taylor

G-9: Coalitional Affinity Games
Simina Brânzei, Kate Larson

G-10: Incorporating Knowledge about Interaction for Uniform Agent Design for Simulation and Operation
Jan Gehrke, Arne Schuldt

G-11: Retrospective Analysis of RoboCup Rescue Agent Teams
Harith Siddhartha, Rahul Sarika, Kamalakar Karlapalem

G-12: Visualization and Analysis Methods for Comparing Agent Behavior in TAC-SCM
William Groves, John Collins, Maria Gini

G-13: Agent Modeling with Individual Human Behaviors
Hiromitsu Hattori, Yuu Nakajima, Toru Ishida

G-14: A Graphical Development Environment for Jade
Stefan Warwas, Christian Hahn, Klaus Fischer

G-15: A Cognitively-Inspired Agent-Based Approach to Collaborative Decision Making in Software Processes
Xiaocong Fan

G-16: Supporting Agent-Oriented Designs with Models of Macroscopic System Behavior
Jan Sudeikat, Wolfgang Renz

G-17: Towards Strategic Kriegspiel Play with Opponent Modeling
Piotr Gmytrasiewicz, Antonio Del Giudice , Josh Bryan

G-18: Modeling a Swarm Phenomenon using Logistic Agents: Application to a Predators-Prey Pursuit
Rodolphe Charrier, Christine Bourjot, François Charpillet

G-19: A Distributed Constraint Optimization Approach for Coordination under Uncertainty
James Atlas

G-20: Improving Privacy in k-Optimal Algorithms for Distributed Constraint Optimization
Rachel Greenstadt

G-21: Multi-Agent Systems for the Real-World
Pedro Szekely, Rajiv Maheswaran, Craig Rogers, Romeo Sanchez, Gergely Gati, Kevin Smyth, Chris Van Buskirk

G-22: An Evolutionary Model of Multi-agent Learning with a Varying Exploration Rate
Michael Kaisers, Karl Tuyls, Simon Parsons, Frank Thuijsman

G-23: Fuzzy Kanerva-based Function Approximation for Reinforcement Learning
Cheng Wu, Waleed Meleis

G-24: Learning from Actions Not Taken: A Multiagent Learning Algorithm
Newsha Khani, Kagan Tumer

G-25: Evolutionary Organizational Search
Boyang Li, Han Yu, Zhiqi Shen, Chunyan Miao

G-26: IGTASC: A Model for Institution-Governed Trusted and Autonomic Service Cooperation
Ji Gao, Hexing Lv

G-27: Formal Aspects of Classifying and Selecting Business Services
Yathiraj Udupi, Munindar Singh

G-28: Effective Multiagent Interactions for Open Cooperative Systems Rich in Services
Maira Rodrigues, Michael Luck

G-29: A Dynamic Interest Rate Adjusting Mechanism for Online Social Lending
Masashi Iwakami, Takayuki Ito, Joaquin Delgado

G-30: Using Relational Concept Knowledge to Improve Search in Referral Networks
Tony White, Shaun McQuaker, Amirali Salehi-Abari

G-31: Multi-agent Planning with Confidentiality
Jiefei Ma, Alessandra Russo, Krysia Broda, Emil Lupu

G-32: Small World Model for Agent Search
Miguel Rebollo

G-33: Learning Whom to Trust: Using Graphical Models for Learning about Information Providers
Philip Hendrix, Yaákov Gal, Avi Pfeffer

G-34: A Secure Protocol with Approximated Fairness in Multiple Interdependent Issue Negotiation
Katsuhide Fujita, Takayuki Ito, Mark Klein

G-35: Handling Prioritized Goals and Subgoals in a Logical Account of Goal Change
Shakil Khan, Yves Lesperance

G-36: Software Self-Reconfiguration: a BDI-based Approach
Fabiano Dalpiaz, Paolo Giorgini, John Mylopoulos

G-37: A Property-based Approach for Characterizing Goals
Lars Braubach, Alexander Pokahr

G-38: Using Swamps to Improve Optimal Pathfinding
Nir Pochter, Aviv Zohar, Jeffrey Rosenschein

List of Demos

Academic Demos

D-1: ORIENT: Interactive Agents for Stage-based Role-play *(Ruth Aylett, Michael Kriegel, MeiYii Lim, Joao Dias, Karin Leichtenstern, Wan Ching Ho, Paola Rizzo)*

D-2: Virtual Institutions Prototype *(Anton Bogdanovych, Simeon Simoff, MarcEsteva)*

D-3: SRM: A Tool for Supplier Performance *(Angela Fabregues, Jordi Madrenas-Ciurana)*

D-4: An Agent-Based Commodity Trading Simulation *(Shih-Fen Cheng, Yee Pin Lim, Chao-Chih Liu)*

D-5: The DSML4MAS Development Environment *(Stefan Warwas, Christian Hahn)*

D-6: EmoEmma: Emotional Speech Input for Interactive Storytelling *(Fred Charles, David Pizzi, Marc Cavazza, Thurid Vogt, Elisabeth Andre)*

D-7: The Senior Companion: a Semantic Web Dialogue System *(Debora Field, Roberta Catizone, WeiWei Cheng, Alexiei Dingli, Simon Worgan, Lei Ye, Yorick Wilks)*

D-8: Emotional Agent in Serious Game (DINO) *(Huiliang Zhang, Miao Chun Yan, Shen Zhiqi, X. Tao, B. Li , Ailiya, Y. Cai)*

D-9: Agent-based Intelligent Collaborative Care Management *(Leelani Kumari Wickramasinghe, Christian Guttmann, Michael Georgeff, Hamid Gharib, Ian Edward Thomas, Simon Thompson, Heinz Schmidt)*

D-10: A Mixed Multi-unit Combinatorial Auctions Test Suite *(Andrea Giovannucci, Jesus Cerquides, Ulle Endriss, Meritxell Vinyals, Juan A. Rodriguez-Aguilar, Bruno Rosell)*

D-11: A Demonstration of the Polaris Poker System *(Michael Bowling, Nicholas Abou Risk, Nolan Bard, Darse Billings, Neil Burch, Joshua Davidson, John Hawkin, Robert Holte, Michael Johanson, Morgan Kan, Bryce Paradis, Jonathan Schaeffer, David Schnizlein, Duane Szafron, Kevin Waugh, Martin Zinkevich)*

D-12: agentTool III: From Process Definition to Code Generation *(Juan C. Garcia-Ojeda, Scott A. DeLoach, Robby)*

D-13: A Multi-agent System for Service Discovery, Selection and Negotiation *(Stefano Bromuri , Visara Urovi, Maxime Morge, Kostas Stathis, Francesca Toni)*

D-14: GENIUS - Negotiation Environment for Heterogeneous Agents *(Koen Hindriks, Catholijn M. Jonker, Sarit Kraus, Raz Lin, Dmytro Tykhonov)*

D-15: Greta: an Interactive Expressive ECA System *(Radoslaw Niewiadomski, Elisabetta Bevacqua, Maurizio Mancini, Catherine Pelachaud)*

D-16: Distributed Planning and Coordination in Non-deterministic Environment *(Antonín Komenda, Jiří Vokřínek, Michal Pěchouček, Gerhard Wickler, Jeff Dalton, Austin Tate, Dušan Pavlíček)*

D-17: Virtual Organization Management eServices *(Jiří Hodík, Jiří Vokřínek, Stefan Bollhalter, Bruno Landau)*

D-18: AOR-Simulation.org –Cognitive Agent Simulation *(Gerd Wagner, Mircea Diaconescu)*

D-19: A Multiagent Turing Test Based on a Prediction Market *(Joseph Farfel, Vincent Conitzer)*

Industrial Demos

D-20: A Sensor Middleware and Agent-based Communication Platform for Supply-Chain Management *(Klaas Thoelen, Sam Michiels, Wouter Joosen, Koen Vangheluwe, Katja Verbeeck)*

D-21: Aerogility - An Intelligent Decision Support System for Managing Service-based Aftermarkets *(Viet Dung Dang, Steve Osborn, Gary Vickers, Malcolm Bridgeford)*

D-22: GreenWave Distributed Traffic Intersection Control *(Dominic Greenwood, Brano Burdiliak, Ivan Trencansky, Hartmut Armbruster, Christian Dannegger)*

D-23: An Agent Oriented Hotel Information System *(Armando Robles, Pablo Noriega, Francisco Cantú)*

Student Demos

D-24: HIHEREI: Human Interaction within Hybrid Environments Regulated through Electronic Institutions *(Ismel Brito, Isaac Pinyol, Daniel Villatoro, Jordi Sabater-Mir)*

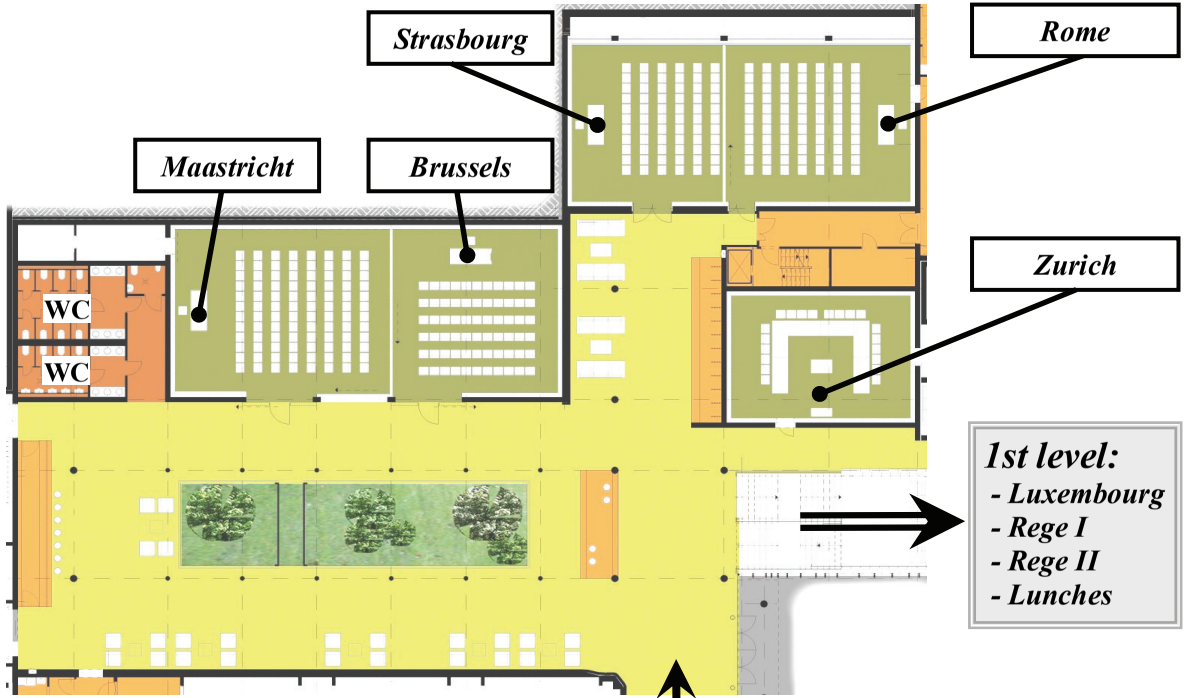
D-25: Evaluating Dynamic Protocols for Open Agent Systems *(Michael Apostolou, Alexander Artikis)*

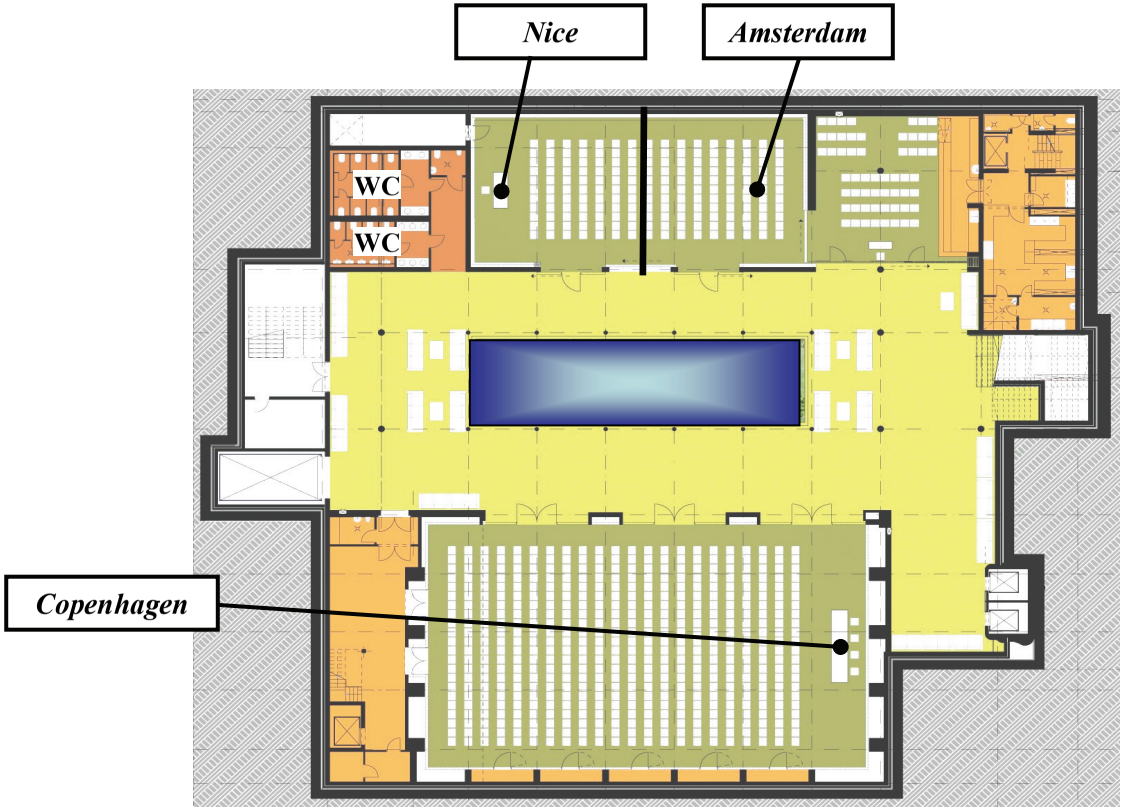
D-26: A System for Monitoring and Interpreting Team Actions of Embodied Agents *(Brandyn White, Ladislau Bölöni)*

D-27: Koko: Engineering Affective Applications *(Derek J. Sollenberger, Munindar P. Singh)*

D-28: An Implementation of Argument Based Discussion *(Patrizio Barbini, Yining Wu, Martin Caminada)*

Room Map


Strasbourg
Rome
Maastricht
Brussels
Zurich
WC
WC
1st level:
- Luxembourg
- Rege I
- Rege II
- Lunches
Ground level
Main Entrance



Basement level

Programme At-a-Glance

	Wednesday, 13 May
08.30	**Opening** *(Room Copenhagen)*
09.00 – 11.00	**S1:** Multi-Robotics *(Room Copenhagen)* **S2:** Multi-Agent Programming Languages *(Room Rome)* **S3:** Norms and Normative Behaviour *(Room Brussels)* **S4:** Economic Approaches I *(Room Nice)* **S5:** Virtual Agents I *(Room Maastricht)* **S6:** Coalitions *(Room Amsterdam)*
11.00	*Coffee Break*
11.30 – 12.30	**Keynote lecture – Manuela Veloso** *(Room Copenhagen)* ***ACM/SIGART Autonomous Agents Research Award 2009*** Teams of Intelligent Robots: Planning and Learning with Skills, Tactics, and Plays
12.30 – 14.00	*Lunch*
14.00 – 15.30	**Panel** *(Room Copenhagen)* Agent Oriented Methodologies and Programming Languages: Towards Practical Systems *Klaus Fischer, Andrea Omicini, Amal El Fallah Seghrouchni, Milind Tambe*
15.30	*Coffee Break*
16.00 – 19.00	**Poster Session** *(Basement Level Foyer)* "Red ○" Session: 16.00 – 17.00 "Blue △" Session: 17.00 – 18.00 "Green □" Session: 18.00 – 19.00

Programme At-a-Glance

<table>
<tr><th></th><th colspan="3">Thursday, 14 May</th></tr>
<tr><td>09.00
–
11.00</td><td colspan="2">S7: MABS / Emergent Behaviour I (Room Rome)
S8: AOSE / Applications (Room Brussels)
S9: POMDPS (Room Strasbourg)
S10: Coordination I / DCOP (Room Amsterdam)
S11: Virtual Agents II / Agent-Human Interaction I (Room Maastricht)
S12: Multi-Agent Learning I (Room Nice)</td><td>S13: Industry Track I (Room Copenhagen)</td></tr>
<tr><td>11.00</td><td colspan="3">Coffee Break</td></tr>
<tr><td>11.30
–
12.30</td><td colspan="3">Keynote Lecture – Klaus G. Troitzsch (Room Copenhagen)
Perspectives and Challenges of Agent-Based Simulation as a Tool for Economics and Other Social Sciences</td></tr>
<tr><td>12.30
–
14.00</td><td colspan="3">Lunch</td></tr>
<tr><td>14.00
–
15.30</td><td colspan="3">Panel (Room Copenhagen)
Theoretical Foundations for Agents and MAS: Is Game Theory Sufficient?
Rosaria Conte, Jacques Ferber, Wiebe van der Hoek, Jeffrey Rosenschein</td></tr>
<tr><td>15.30</td><td colspan="3">Coffee Break</td></tr>
<tr><td>16.00
–
18.00</td><td>S14: Organizations/Social Networks (Room Nice)
S15: Argumentation/Dialogue/Protocols (Room Rome)
S16: Planning / Search (Room Brussels)
S17: Commitments / Logical Approaches (Room Amsterdam)
S18: Agent-Human Interaction II / Evaluation Techniques (Room Strasbourg)</td><td>S19: Industry Track II (Room Copenhagen)</td><td rowspan="2">Demos (Ground Level Foyer and Room Maastricht)</td></tr>
<tr><td>18.00
–
19.00</td><td colspan="2">Invited Talk – Ariel Procaccia (Room Copenhagen)
2008 Victor Lesser Distinguished Dissertation Award
New Insights on Where to Locate a Library</td></tr>
</table>

Programme At-a-Glance

	Friday, 15 May
09.00 – 11.00	**S20:** Reputation and Trust *(Room Maastricht)* **S21:** Multi-Agent Learning II/ Emergent Behaviour II *(Room Copenhagen)* **S22:** Negotiation/Conflict Resolution *(Room Rome)* **S23:** Economic Approaches II/Auctions/Mechanism Design *(Room Nice)* **S24:** Agent Reasoning/Deliberation/Decision Mechanism *(Room Brussels)* **S25:** Coordination II/Resource Allocation *(Room Amsterdam)*
11.00	*Coffee Break*
11.30 – 12.30	**Keynote Lecture – Michael N. Huhns** *(Room Copenhagen)* From DPS to MAS to ...: Continuing the Trends
12.30 – 14.00	**Community Meeting** *(with lunch on site)*
14.00 – 14.30	**Presentation of AAMAS10 and Closing** *(Room Copenhagen)*

Keynote Speakers

Michael N. Huhns
University of South Carolina

From DPS to MAS to ...: Continuing the Trends

Abstract
The most interesting of the computing challenges are those that involve the problems and opportunities afforded by massive decentralization. The problems and opportunities arise in domains where controlled action is necessary, but centralized control is infeasible. These are the traditional domains of distributed problem solving and multiagent systems, and they include

- Healthcare for patients
- Grocery shopping for consumers
- Re-architected IT systems for the U.S. Navy
- Individualized traffic control
- Energy distribution
- Public finances
- Bandwidth allocation

However, the current incarnations of these domains are scaled well beyond anything envisioned originally. Nevertheless, traditional techniques derived from artificial intelligence are still mostly appropriate. Specifically, representation, reasoning, learning, planning, and situated semantics -- when distributed computationally and extended to multiple loci of intelligence -- will all be part of potential solutions. They will affect not only the ways systems will be implemented and executed, but also the ways they will be developed. Newer aspects of solutions will include

- Agents that represent individual preferences
- Market mechanisms
- Consensus behavior

This talk will focus on the domains and their challenges. It will then describe the trends that I have observed in our research technologies and show how they can be used to confront the challenges. It is hoped that new avenues of research will be revealed from following the trends.

Biography
Dr. Michael N. Huhns is the NCR Professor of Computer Science and Engineering and director of the Center for Information Technology at the University of South Carolina. His degrees in electrical engineering are from the University of Michigan (B.S.) and the University of Southern California (M.S. and Ph.D.). He is the author of six books and more than 200 papers in multiagent systems, service-oriented computing, and ontologies. With Munindar Singh, he coauthored the textbook Service-Oriented Computing: Semantics, Processes, Agents [Wiley 2005]. He serves on the editorial boards for 12 journals and is a founding member of the International Foundation for Multiagent Systems, a Senior Member of the ACM, and a Fellow of the IEEE.

Klaus G. Troitzsch
Universität Koblenz-Landau

Perspectives and Challenges of Agent-Based Simulation as a Tool for Economics and Other Social Sciences

Abstract
This talk will argue that the agent-based simulation approach is just the one appropriate to the social sciences (including economics). Although there were many predecessor approaches, which tried to build formal models of social systems, all of them fell short of the peculiar features of the objects of all social sciences: complex systems consisting of numerous autonomous actors who interact with each other, who take on different roles at the same time, who are conscious of their interactions and roles and who can communicate with the help of symbolic languages even about the counterfactual.

These human actors are unlike physical particles although their behaviour might sometimes be quite similar to physical particles when humans occur in very large numbers (but they are most interesting when they form only small networks). Real human actors would not concede that their behaviour is stochastic, they will always assert that their actions are deliberate (but at the same time these actions are not entirely predictable). Human actors are not entirely rational although their behaviour might sometimes seem as if they were (but they are most interesting when their rationality is only bounded and when their payoff is multidimensional).

Social systems seem to be the most adaptive systems that we know about, and this is why we could perhaps use them as patterns for artificial adaptive systems – and

if we knew enough about the modes of operations of human social systems, social sciences could even contribute to agent-based modelling in other fields.

Manuela Veloso
Herbert A. Simon Professor
Carnegie Mellon University (USA)

Teams of Intelligent Robots: Planning and Learning with Skills, Tactics, and Plays

Abstract
I will share my challenging journey of research on multi-robot systems. Robots are physical agents with a seamless integration of perception, cognition, and action. My presentation will be focused on teams of intelligent autonomous robots performing tasks in highly uncertain domains, in particular in robot soccer and indoor tasks. Robots need to jointly assess the state of their environment, communicate with each other, make decisions, execute actions towards the achievement of team objectives, and learn from observation and feedback based on the outcome of their actions. I will present the solutions we created, and discuss some of many remaining open questions. The talk reports on joint work with my extraordinary past and present students.

Awards

There are a number of awards associated with the AAMAS conference, some of which are known in advance, and some of which are announced at the conference.

The list of the awards to be made at AAMAS 2009 is as follows:

ACM SIGART Autonomous Agents Research Award

The ACM SIGART Autonomous Agents Research Award is an annual award for excellence in research in the area of autonomous agents. The award is intended to recognize researchers in autonomous agents whose current work is an important influence on the field. The award is an official ACM award, funded by an endowment created by ACM SIGART from the proceeds of previous Autonomous Agents conferences. Candidates for the award are nominated through an open nomination process.

The 2009 ACM SIGART Autonomous Agents Research Award recipient is Prof. Manuela Veloso, from Carnegie Mellon University . She will present a plenary talk entitled " Teams of Intelligent Robots: Planning and Learning with Skills, Tactics, and Plays ".

IFAAMAS Influential Paper Award

The International Foundation for Autonomous Agents and Multi-Agent Systems set up an influential paper award in 2006 to recognize publications that have made seminal contributions to the field. Such papers represent the best and most influential work in the area of autonomous agents and multi-agent systems. These papers might, therefore, have proved a key result, led to the development of a new sub-field, demonstrated a significant new application or system, or simply presented a new way of thinking about a topic that has proved influential. The award is open to any paper that was published at least 10 years before the award is made. The paper can have been published in any journal, conference, or workshop. The award is funded by the Agent Theories, Architectures and Languages foundation.

Previous awards are as follows:

2008

M. E. Bratman, D. J. Israel and M. E. Pollack (1988)
Plans and resource-bounded practical reasoning. Computational Intelligence, 4, pages 349-355.

E. H. Durfee and V. Lesser (1991)
Partial global planning: A coordination framework for distributed hypothesis formation. In: IEEE Transactions on Systems, Man, and Cybernetics, 21, pages 1167-1183.

2007

J. S. Rosenschein and M. R. Genesereth (1985)
Deals Among Rational Agents. In: Proceedings of the 9th International Joint Conference on Artificial Intelligence, Los Angeles , California , August 1985, pages 91-99.

A. Rao and M. Georgeff (1991)
Modelling rational agents within a BDI-architecture. In: Proceedings of the 2nd International Conference on Principles of Knowledge Representation and Reasoning, Cambridge, Massachussets, pages 473-484.

B. J. Grosz and S. Kraus (1996)
Collaborative Plans for Complex Group Actions. Artificial Intelligence, 86, pages 269-358.

2006

Cohen, P. R. and Levesque, H. (1990)
Intention is choice with commitment. Artificial Intelligence , 42(2-3), pages 213-261.

Davis , R. and Smith, R. (1983)
Negotiation as a Metaphor for Distributed Problem Solving. Artificial Intelligence, 20(1), pages 63-109.

The 2009 IFAAMAS Influential Paper Award is given to the series of edited collections of papers on Distributed AI published in the late 1980s:

M. N. Huhns. (Ed.) (1987)
Distributed Artificial Intelligence. London, Pitman.

A. Bond and L. Gasser. (Eds.) (1988)
Readings in Distributed Artificial Intelligence. San Mateo, CA, Morgan Kaufmann.

L. Gasser and M. N. Huhns. (Eds.) (1989)
Distributed Artificial Intelligence (Volume II). Pitman and Morgan Kaufmann.

IFAAMAS Victor Lesser Distinguished Dissertation Award

This award was started for dissertations defended in 2006 and is named for Professor Victor Lesser, a long standing member of the AAMAS community who has graduated a large number of outstanding PhD students in the area. To be eligible for the 2008 award, a dissertation had to have been written as part of a PhD defended during the year 2008, and had to be nominated by the supervisor with three supporting references. Selection is based on originality, depth, impact and written quality, supported by quality publications. Previous winners of this award were Radu Jurca (2007) and Vincent Conitzer (2006).

The 2008 IFAAMAS Victor Lesser Distinguished Dissertation Award recipient is Ariel Procaccia for the dissertation entitled "Computational Voting Theory: Of the Agents, By the Agents, For the Agents". There will be an invited talk in the Conference, named "New Insights on Where to Locate a Library ", based on the awarded Phd thesis.

Pragnesh Jay Modi Best Student Paper Award

The Pragnesh Jay Modi Best Student Paper Award is made annually at the AAMAS conference to the paper that is judged to be the best paper at the conference whose main author is registered as a student at the time of paper submission. Typically the student is registered for a PhD, although undergraduate and masters student papers may also be considered. The winning paper may have multiple authors, not all required to be students, but to be eligible, the main author of the paper must be a student. The award is named for Pragnesh Jay Modi (1975-2007), an active and influential member of the AAMAS research community who died tragically young in April 2007. Jay obtained his PhD from the University of Southern California in 2003, and at the time of his death was a junior faculty member at Drexel University, Philadelphia. Jay's PhD thesis has been foundational in the area of distributed constraint optimization (DCOP), and among his many accomplishments were an NSF-CAREER award and IEEE Intelligent Systems magazine's award for "AI's 10 to watch".

Nominations for the award are made by Program Committee members, Senior Program Committee members, Area Chairs and Program Chairs.

Best Paper Award

This award is for a selected paper which does not have a student as primary author. Nominations are made by Program Committee members, Senior Program Committee members, Area Chairs and Program Chairs.

Best Industry Track Paper

This award is for a selected paper from the Industry track. The award selection will be done in consultation by the advisory board and the industry track co-chairs.

Best Demos

Demonstration submissions were divided in four different categories:

* Industrial software
* Academic software
* Robotics
* Student projects

A best demo award will be chosen separately for each category. A price of 1000 Euro is provided for the winner in the category "Student projects." The award selection will be done in consultation by the advisory board and the exhibits & demo co-chairs.

Best Senior Program Committee member

This award is for a selected member of the Senior Program Committee based on outstanding contribution to the management of the paper selection process, including reviewing, encouraging discussion, obtaining extra reviews if needed, and dealing with any issues arising in the course of paper selection.

Best Program Committee member

This award is for a selected member of the Program Committee based on outstanding quality of reviews and discussion of papers.

Supporting Societies

- ECCAI
- AAAI
- ACM/Sigart
- Artificial Intelligence Special Interest Group of the Hungarian John von Neumann Society

Sponsors

We wish to thank the followings for their contribution to the success of this conference:

The Foundation for Intelligent Physical Agents

European Office of Aerospace Research and Development, Air Force Office of Scientific Research, United States Air Force Research Laboratory

Microsoft Research

Drexel University

Whitestein Technologies

Wiley – Blackwell Ltd

Social Programmes

Welcome Reception
12 May, Tuesday, 18.30 – 19.30
Europa Congress Center
(H-1021 Budapest, Hárshegyi u. 5-7.)

All registered Conference participants are cordially invited.

Banquet
14 May, Thursday, 19.30 – 22.00
"Európa" Boat
(H-1011 Budapest, Szilágyi Dezső rakpart/quay)

A cruise and dinner on the River Danube, where you can enjoy magnificent views of historical Budapest and catch a glimpse of Margaret Island, the Parliament, the Hotel Gellért, the Liberation Monument, the graceful bridges and a number of stunning Budapest buildings of Budapest while tasting traditional Hungarian and special international meals and drinks.

Shuttle buses to take the participants from the Conference venue to the quay and back are provided. Buses will depart at 18.45 from the Main Entrance of the Europa Congress Center.

Limited number of extra tickets are available at the Registration Desk until 12.00 on 14 May. Price: EUR 105.

General Information

Venue

The AAMAS 2009 will take place in the Europa Congress Center (ECC) *(H-1021 Budapest, Hárshegyi u. 5-7.)*.

Some workshops on 11 May (W4 and W5) and 12 May (W2, W17/W15 and W26) will be held in Hotel Budapest *(1026 Budapest, Szilágyi Erzsébet fasor 47.)*.

Registration and Information Desk

Registration and Information Desk operates on the Ground Level of the main venue (ECC).

Opening hours:

Sunday, 10 May:	08.30 – 18.00
Monday, 11 May:	08.30 – 18.00
Tuesday, 12 May:	08.30 – 18.00
Wednesday, 13 May:	08.00 – 18.00
Thursday, 14 May:	08.30 – 18.00
Friday, 15 May:	08.30 – 15.00

Badges

Please, make sure that you wear your badge at every event you participate in, including lunches and the Social Programmes. As different events (tutorials, workshops, doctoral symposium, technical sessions) have different colour badges, please pay attention to use the appropriate badge.

Insurance

The Organizers of the Conference do not provide insurance and do not take responsibility for any loss, accident or illness that might occur during the Conference or in the course of travel to or from the meeting site. It is, therefore, the responsibility of the participants to check their coverage with their insurance provider.

Bank, Currency, Credit Cards

The unit of currency is the Hungarian Forint (HUF), denoted as "Ft" by the Hungarians. International credit cards are accepted at most hotels, restaurants and shops. An ATM is available in the lobby of the Europa Hotel.

Internet / WiFi

Wireless internet is available both in the ECC and Hotel Budapest.

Authors' Instruction – Presenters' Ready Room

All rooms are equipped with projector and laptop. Presenters are requested to upload their presentations to the room laptop if possible using a USB stick. Laptops are equipped with MS Powerpoint, Adobe Reader, Windows Media Player and Quicktime. A Presenter's Ready Room will be available to allow presenters to check compatibility of their presentation with the local hardware.

Voltage

The electricity supply in Hungary is 230 V AC (50 Hz).

Useful Telephone Numbers

(can be dialed from any phone without a coin or a card)

Ambulance: 104 Fire Brigade: 107
Police: 105 Overall Emergency: 112

Public Transport in Budapest

Public transportation in general is extensive, reliable and cheap. Fares cannot be paid on board and there are fines for travelling without a validated ticket. Tickets are valid for one ride only. A new ticket must be used every time you change lines. Tickets can be cancelled in meters (red punch slots on the board of the tram or bus) or at the metro station entrances (orange boxes). Tickets can be purchased at metro stations, hotels, newsstands and tobacco shops. Complimentary tickets are available at the Registration and Information Desk(s).

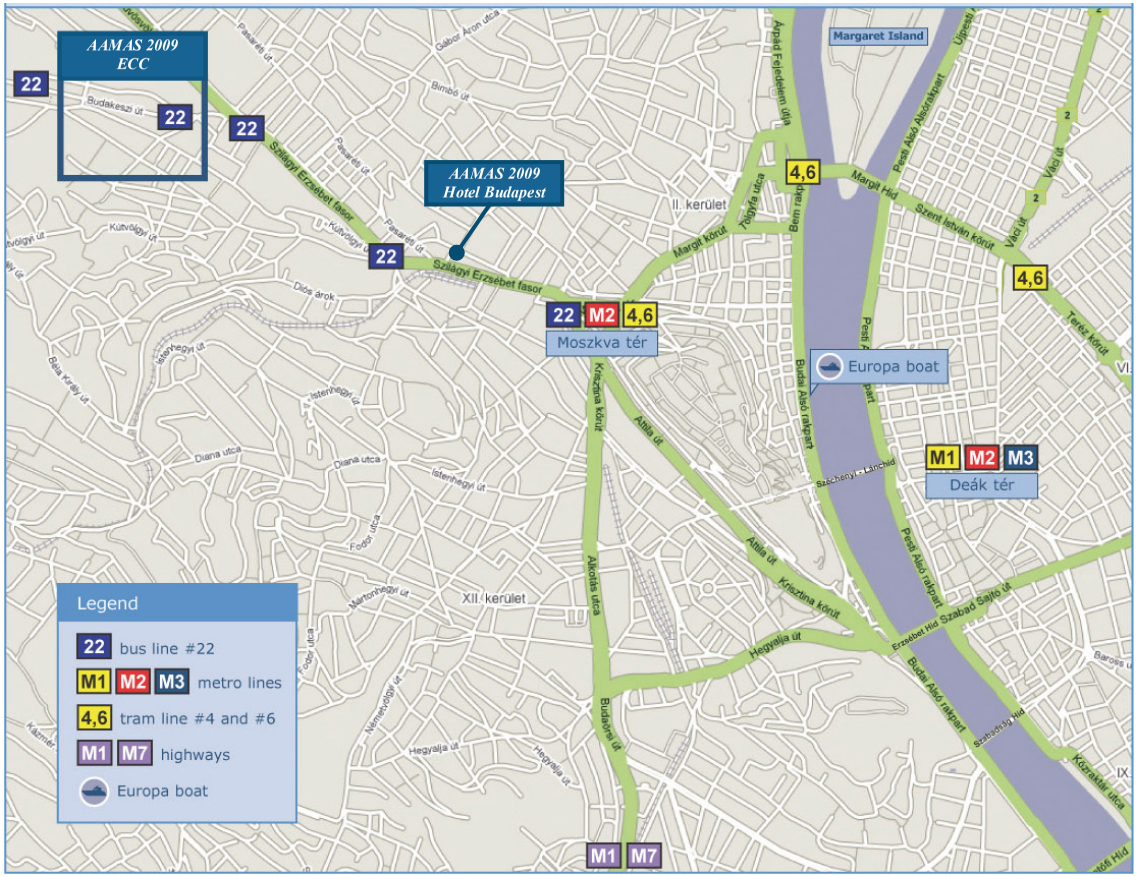
Instead of single tickets you may consider bying a carnet of 10 tickets or a pass (for 1 or 7 days), or a Budapest Card. These are available at the metro stations or at end stations of public transport.

All three metro lines meet at Deák tér and run from 4.30 am to 11.00 pm. Most bus and tramlines operate until 11.00 pm (further information: http://www.bkv.hu).

Calling taxi in Budapest

Főtaxi	+36	80-222-222 *(free green number)*, 1-2222-222, 20-9222-222, 30-2222-222, 70-2222-222
City Taxi	+36	1-2111-111, 20-9211-111, 30-9211-111, 70-2111-111
Rádiótaxi	+36	1-3777-777, 20-9777-777, 30-9777-777
Tele 5 Taxi	+36	1-3555-555, 20-9355-555
6x6 Taxi	+36	1-2666-666, 1-4666-666, 1-6666-666
Taxi 2000	+36	1-2000-000, 30-2000-000
Buda Taxi	+36	1-233-3333, 20-933-3333

Never sit in a taxi without having the official fares indicated and provided or in a taxi without one of the company names above.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ECC
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Moszkva tér
Europa boat
Deák tér
Legend
bus line #22
metro lines
tram line #4 and #6
highways
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