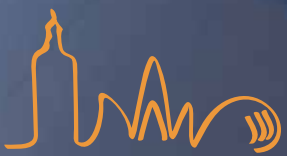
eleventh international conference on autonomous agents and multiagent systems

AAMAS 2012

CONFERENCE PROGRAM



Valencia

4th- 8th June 2012

TABLE OF CONTENTS

PREFACE

The Autonomous Agents and MultiAgent Systems (AAMAS) conference series brings together researchers from around the world to share the latest advances in the field. It provides a high-profile and high-quality forum for research in the theory and practice of autonomous agents and multiagent systems. AAMAS 2002, the first of the series, was held in Bologna, followed by Melbourne (2003), New York (2004), Utrecht (2005), Hakodate (2006), Honolulu (2007), Estoril (2008), Budapest (2009), Toronto (2010), and Taipei (2011). These are the proceedings of AAMAS 2012, held in Valencia, in June 2012.

In addition to the general track for the AAMAS 2012 conference, submissions were invited to three special tracks: a robotics track, a virtual agents track and an innovative applications track. The aims of these special tracks were to give researchers from these areas a strong focus, to provide a forum for discussion and debate within the encompassing structure of AAMAS, and to ensure that the impact of both theoretical contributions and innovative applications were recognized. The tracks were chaired by leaders in the corresponding fields: Daniele Nardi for the robotics track, Stefan Kopp for the virtual agents track, and Klaus Fischer and Alex Rogers for the innovative applications track. The special track chairs provided critical input to selection of Program Committee (PC) and Senior Program Committee (SPC) members, and to the reviewer allocation and the review process itself. The final decisions concerning acceptance of papers were taken by the AAMAS 2012 Program Co-chairs in discussion with the special track chairs.

Only full paper submissions were solicited for AAMAS 2012. The general, robotics, virtual agents, and innovative applications tracks received 525, 75, 45, and 31 submissions respectively, for a total of 676 submissions at the submission deadline, with 671 papers going on to be reviewed (a few papers were withdrawn after the deadline).

After a thorough review and discussion process which included an opportunity for authors to respond to reviewer comments, 137 papers were selected for publication as full papers (acceptance rate 20.4%), each of which was allocated 8 pages in the proceedings and allocated 20 minutes in the program for oral presentation. Another 154 papers were selected as extended abstracts and allocated 2 pages each in the proceedings. Both full papers and extended abstracts were presented as posters during the conference. A number of accepted papers were subsequently withdrawn, leaving 136 full papers and 146 extended abstracts.

Of the submissions, 401 (59%) were indicated as being student papers, which indicates that AAMAS continues to be a nurturing environment for students. Submissions were assigned keywords, each of which was classified under one of 15 top-level topics (e.g., "Agent Cooperation"), including a new keyword "Perspectives" which attracted six submissions.

Representation of top-level topics (measured by first keyword) was broad, with top counts in the areas of Economic Paradigms (113 submissions), Agent Cooperation(110), Learning and Adaptation (66), Agent Reasoning (64), Robotics (54) and Agreement Technologies (40).

Looking at specific keywords (e.g., "Agent Cooperation::Distributed problem solving"), the most popular submission topics (again, measured by first keyword) were game theory (43 submissions), teamwork, coalition formation, and coordination (34), distributed problem solving (33), single agent learning (27), robot teams, multi-robot systems, robot coordination (26), planning (25), auction and mechanism design (24), and multiagent learning (21).

We thank the PC and SPC members of AAMAS 2012 for their thoughtful reviews and extensive discussions. We thank Daniele Nardi, Stefan Kopp, Klaus Fischer, and Alex Rogers for making the robotics, the virtual agents and the innovative applications tracks a success. We thank Mehdi Dastani and Dave Shield for putting together the proceedings. The program represents the intellectual motivation for researchers to come together at the conference, but the success of the event is dependent on the many other elements that make up the week - especially the tutorials, workshops, and doctoral consortium. We thank all members of the Conference Organising Committee for their dedication, enthusiasm, and attention to detail, and wish to particularly thank Vicente Botti as Chair of the Local Organising Committee for his contributions. We also thank Dave Shield for his patience and support regarding Confmaster during every stage between the submission process and the actual AAMAS 2012 event.

Finally, we would like to thank the programme committee and senior programme committee members for their work, and the authors for submitting their work to AAMAS.

Vincent Conitzer and Michael Winikoff,
AAMAS 2012 Program Co-Chairs

Wiebe van der Hoek and Lin Padgham,
AAMAS 2012 General Co-Chairs

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COMPACT SCHEDULE

	MONDAY, JUNE 4TH		TUESDAY, JUNE 5TH		
	WORKSHOPS	TUTORIALS	WORKSHOPS	TUTORIALS	
09:00 - 10:20	W01, W02, W04, W05, W06 W10, W13, W15, W17, W22	T01, T02, T04 T07, T08	W03, W04, W07, W08, W09 W11, W16, W18, W19, W20 W21, W23, TAC	T03, T05, T06 T10	DOCTORAL MENTORING
10:20 - 10:50	Coffee Break		Coffee Break		
10:50 - 13:00	W01, W02, W04, W05, W06 W10, W13, W15, W17, W22	T01, T02, T04 T07, T08	W03, W04, W07, W08, W09 W11, W16, W18, W19, W20 W21, W23, TAC	T03, T05, T06 T10	
13:00 - 14:20	LUNCH		LUNCH		
14:20 - 16:00	W02, W04, W05, W06, W10 W12, W13, W15, W17, W22	T01, T02, T04 T07, T08	W03, W07, W08, W09, W11 W14, W17, W18, W19, W20 W21, W23, TAC	T03, T06, T09 T10	
16:00 - 16:30	Coffee Break		Coffee Break		
16:30 - 18:30	W02, W04, W05, W06, W10 W12, W13, W15, W17, W22	T01, T02, T04 T07, T08	W03, W07, W08, W09, W11 W14, W17, W18, W19, W20 W21, W23, TAC	T03, T06, T09 T10	
20:30 - 22:00			WELCOME PAELLA		

WEDNESDAY, JUNE 6TH

09:00 - 09:20	Welcome & Official Opening (Paranimf)					
09:20 - 10:20	Invited Talk (Paranimf)					
10:20 - 11:20	Coffee Break (1G0) (1G1)		Posters 1 (1G0) (1G1)		Demos 1 (1G 1.0) (1G 1.1) (1G 1.2)	
11:20 - 13:00	1A (1G 0.1)	1B (1G 0.4)	1C (1G 0.5)	1D (1G 0.6)	1E (1G 1.4)	1F (1G 1.7)
13:00 - 14:20	LUNCH					
14:20 - 16:00	2A (1G 0.1)	2B (1G 0.4)	2C (1G 0.5)	2D (1G 0.6)	2E (1G 1.4)	2F (1G 1.7)
16:00 - 17:00	Coffee Break (1G0) (1G1)		Posters 2 (1G0) (1G1)		Demos 1 (1G 1.0) (1G 1.1) (1G 1.2)	
17:00 - 18:00	Invited Talk (Paranimf)					

THURSDAY, JUNE 7TH

09:20 - 10:20	Invited Talk (Paranimf)					
10:20 - 11:20	Coffee Break (1G0) (1G1)		Posters 3 (1G0) (1G1)		Demos 2 (1G 1.0) (1G 1.1) (1G 1.2)	
11:20 - 13:00	3A (1G 0.1)		3C (1G 0.5)	3D (1G 0.6)	3E (1G 1.4)	3F (1G 1.7)
13:00 - 14:20	LUNCH					
14:20 - 16:00	4A (1G 0.1)	4B (1G 0.4)	4C (1G 0.5)	4D (1G 0.6)	4E (1G 1.4)	4F (1G 1.7)
16:00 - 17:00	Coffee Break (1G0) (1G1)		Posters 4 (1G0) (1G1)		Demos 2 (1G 1.0) (1G 1.1) (1G 1.2)	
17:00 - 18:00	Ph.D. Award Talk (Paranimf)					
	GALA DINNER					

FRIDAY, JUNE 8TH

09:00 - 09:20	Influential Paper Award Presentation (Paranimf)					
09:20 - 10:20	Coffee Break					
10:20 - 11:20	5A (1G 0.1)	5B (1G 0.4)	5C (1G 0.5)	5D (1G 0.6)	5E (1G 1.4)	5F (1G 1.7)
11:20 - 13:00	Community Session (Paranimf)					
13:00 - 14:20	Closing / AAMAS 2013 Presentation (Paranimf)					
14:20 - 16:00	LUNCH					

DETAILED SCHEDULE

MONDAY, JUNE 4TH

08:15-18:30 **Registration & Help Desk** Registration Desk

09:00-13:00 **Workshop and Tutorials** (Coffee break: 10:20-10:50)

T01	Logics and Multi-Agent Programming Languages	1G 1.0
T02	Computational and formal models of cognitive emotions	1G 1.1
T04	Decision Making in Multiagent Settings	1G 1.2
T07	Social Laws for Multi-Agent Systems	1G 1.AB
T08	Equilibrium Computation	1G 1.JR
W01	Agents Applied in Health Care (AAHC)	1G 1.5
W02	Agent-based Complex Automated Negotiations (ACAN)	1G 0.4
W04	Adaptive and Learning Agents (ALA)	1G 0.5
W05	Agent Oriented Software Engineering (AOSE)	1G 1.6
W06	Argumentation in Multiagent Systems (ArgMAS)	1G 0.1
W10	Cognitive Agents in Virtual Environments (CAVE)	1G 0.2
W13	Declarative Agent Languages and Technologies (DALT)	1G 1.3
W15	Human-Agent Interaction Design and Models (HAIDM)	1G 1.4
W17	Multi-Agent Based Simulation (MABS)	1G 0.6
W22	Joint Workshop on Trading Agent Design and Analysis and Agent-Mediated EC (TADA/AMEC)	1G 1.7

13:00-14:20 **LUNCH**

14:20-18:30 **Workshop and Tutorials** (Coffee break: 16:00-16:30)

T01	Logics and Multi-Agent Programming Languages	1G 1.0
T02	Computational and formal models of cognitive emotions	1G 1.1
T04	Decision Making in Multiagent Settings	1G 1.2
T07	Social Laws for Multi-Agent Systems	1G 1.AB
T08	Equilibrium Computation	1G 1.JR
W02	Agent-based Complex Automated Negotiations (ACAN)	1G 0.4
W04	Adaptive and Learning Agents (ALA)	1G 0.5
W05	Agent Oriented Software Engineering (AOSE)	1G 1.6
W06	Argumentation in Multiagent Systems (ArgMAS)	1G 0.1
W10	Cognitive Agents in Virtual Environments (CAVE)	1G 0.2
W12	Cooperative Games in Multiagent Systems (CoopMAS)	1G 1.5
W13	Declarative Agent Languages and Technologies (DALT)	1G 1.3
W15	Human-Agent Interaction Design and Models (HAIDM)	1G 1.4
W17	Multi-Agent Based Simulation (MABS)	1G 0.6
W22	Joint Workshop on Trading Agent Design and Analysis and Agent-Mediated EC (TADA/AMEC)	1G 1.7

TUESDAY, JUNE 5TH

08:15-18:30	**Registration & Help Desk**	Registration Desk
09:00-18:00	**Doctoral Mentoring Program**	1E SA
09:00-13:00	**Workshop and Tutorials** (Coffee break: 10:20-10:50)	
	T03 Multi-Agent Reinforcement Learning	1G 1.0
	T05 Agent-Mediated Electronic Negotiation	1G 1.AB
	T06 Computational Aspects of Cooperative Game Theory	1G 1.1
	T10 Game Theory and Security	1G 1.JR
	W03 Agents and Data Mining Interaction (ADMI)	1G 1.7
	W07 Autonomous Robots and Multirobot Systems (ARMS)	1G 0.1
	W08 Agent Technologies for Energy Systems (ATES)	1G 0.2
	W09 Agent in Traffic and Transportation (ATT)	1G 0.6
	W11 Coordination, Organization, Institutions and Norms (COIN)	1G 0.4
	W16 Logical Aspects of Multi-Agent Systems (LAMAS)	1G 1.6
	W18 Multiagent Sequential Decision Making in Uncertain Domains (MSDM)	1G 1.3
	W19 Optimisation in Multi-Agent Systems (OptMAS)	1G 1.4
	W20 Programming Multi-Agent Systems (ProMAS)	1G 1.5
	W21 Spatial Computing (SCW)	1G 1.2
	W23 Trust in Agent Societies (TRUST)	1F SJ
	TAC Trading Agent Competition (TAC)	1G 0
13:00-14:20	**LUNCH**	
14:20-18:30	**Workshop and Tutorials** (Coffee break: 16:00-16:30)	
	T03 Multi-Agent Reinforcement Learning	1G 1.0
	T06 Computational Aspects of Cooperative Game Theory	1G 1.1
	T09 Designing Computer Agents for Human-Computer Decision-Making	1G 1.AB
	T10 Game Theory and Security	1G 1.JR
	W03 Agents and Data Mining Interaction (ADMI)	1G 1.7
	W07 Autonomous Robots and Multirobot Systems (ARMS)	1G 0.1
	W08 Agent Technologies for Energy Systems (ATES)	1G 0.2
	W09 Agent in Traffic and Transportation (ATT)	1G 0.6
	W11 Coordination, Organization, Institutions and Norms (COIN)	1G 0.4
	W14 Emotional and Empathic Agents (EEA)	1G 1.6
	W17 Multi-Agent Based Simulation (MABS)	1G 0.5
	W18 Multiagent Sequential Decision Making in Uncertain Domains (MSDM)	1G 1.3
	W19 Optimisation in Multi-Agent Systems (OptMAS)	1G 1.4
	W20 Programming Multi-Agent Systems (ProMAS)	1G 1.5
	W21 Spatial Computing (SCW)	1G 1.2
	W23 Trust in Agent Societies (TRUST)	1F SJ
	TAC Trading Agent Competition (TAC)	1G 0
20:30-22:00	**Welcome Paella** (Reception with food and drinks)	

WEDNESDAY, JUNE 6TH

08:15-18:30	**Registration & Help Desk**	Registration Desk
09:00-09:20	**Welcome & Official Opening**	Paranimf
09:20-10:20	**Invited Talk**	Paranimf

"Lab and field evidence of a cognitive hierarchy in strategic thinking"
Prof. Colin Camerer

10:20-11:20	**Coffee break + Posters + Demos**	Poster session shared with EC'12
	Poster Session 1	1G0 - 1G1
	Demo Session 1 (morning)	1G 1.0, 1G 1.1, 1G 1.2

11:20-13:00	**Session 1**		
	1A	Innovative Applications	1G 0.1
	1B	Teamwork	1G 0.4
	1C	Learning	1G 0.5
	1D	Social Choice	1G 0.6
	1E	Game Theory	1G 1.4
	1F	Planning	1G 1.7
13:00-14:20	**LUNCH**		
14:20-16:00	**Session 2**		
	2A	Virtual Agents	1G 0.1
	2B	Distributed Problem Solving	1G 0.4
	2C	Learning II	1G 0.5
	2D	Social Choice II	1G 0.6
	2E	Game Theory II	1G 1.4
	2F	Knowledge Representation & Reasoning	1G 1.7

16:00-17:00	**Coffee break + Posters + Demos**	Poster session shared with EC'12
	Poster Session 2	1G0 - 1G1
	Demo Session 1 (afternoon)	1G 1.0, 1G 1.1, 1G 1.2
17:00-18:00	**ACM/SIGART Autonomous Agents Research Award Talk**	Paranimf

"**Social Contexts"**
Prof. Moshe Tennenholtz

THURSDAY, JUNE 7TH

08:15-18:30	**Registration & Help Desk**	Registration Desk
09:20-10:20	**Invited Talk**	Paranimf

"Delivering the Smart Grid: A Grand Challenge for Autonomous Agents Research"
Dr. Alex Rogers

10:20-11:20	**Coffee break + Posters + Demos**	
	Poster Session 3	1G0 - 1G1
	Demo Session 2 (morning)	1G 1.0, 1G 1.1, 1G 1.2
11:20-13:00	**Session 3**	
	3A Robotics	1G 0.1
	3C Human-Agent Interaction	1G 0.5
	3D Economies and Markets	1G 0.6
	3E Game Theory III	1G 1.4
	3F Agent-based software development	1G 1.7
13:00-14:20	**LUNCH**	
14:20-16:00	**Session 4**	
	4A Robotics II	1G 0.1
	4B Agent Societies	1G 0.4
	4C Argumentation & Negotiation	1G 0.5
	4D Economies and Markets II	1G 0.6
	4E Game Theory IV	1G 1.4
	4F Logics for Agency	1G 1.7
16:00-17:00	**Coffee break + Posters + Demos**	
	Poster Session 4	1G0 - 1G1
	Demo Session 2 (afternoon)	1G 1.0, 1G 1.1, 1G 1.2
17:00-18:00	**Victor Lesser Distinguished Dissertation Award Talk**	Paranimf

"Social Norms for Self-Policing Multi-agent Systems and Virtual Societies"
Dr. Daniel Villatoro

21:00-23:00	**GALA DINNER**

FRIDAY, JUNE 8TH

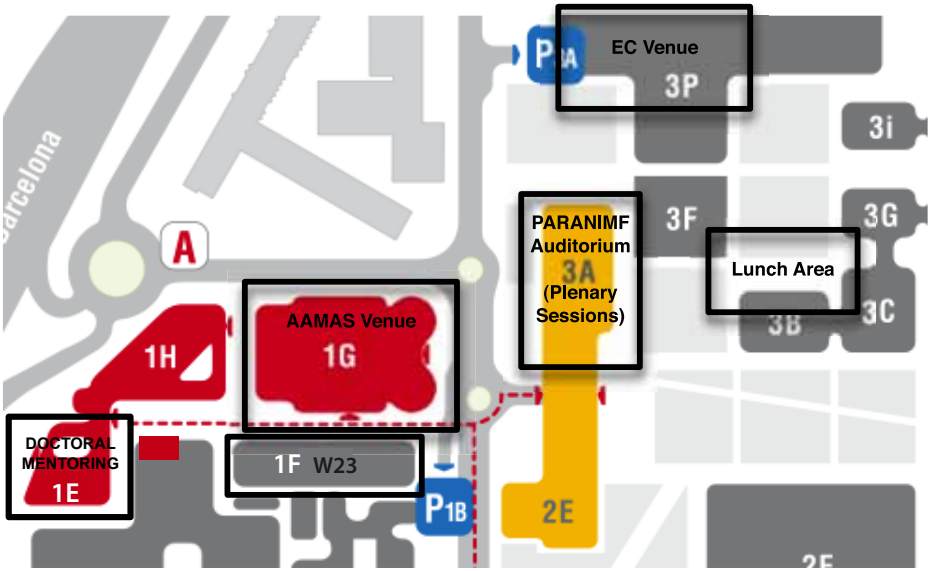
08:00-15:30	**Registration & Help Desk**	Registration Desk
09:00-10:00	**IFAAMAS Influential Paper Award**	Paranimf

"A market-oriented programming enviornment and its application to distributed multicommodity flow problems"
Prof. Michael Wellman

"Towards Flexible Teamwork"
Prof. Milind Tambe

10:00-10:30	**Coffee break**	
10:30-11:50	**Session 5**	
	5A Robotics III	1G 0.1
	5B Teamwork II	1G 0.4
	5C Emergence	1G 0.5
	5D Auction & Mechanism Design	1G 0.6
	5E Game & Agent Theories	1G 1.4
	5F Logic and Verification	1G 1.7
11:50-12:00	**Short break**	1G 0
12:00-13:00	**Community Session**	Paranimf
13:00-13:20	**Closing / AAMAS 2013 Presentation**	Paranimf
13:20-14:40	**LUNCH**	

AAMAS AT UPV CAMPUS



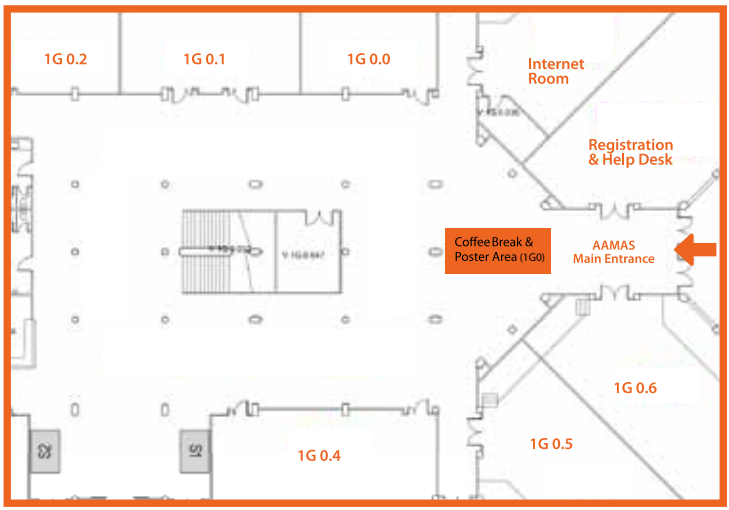
The plenary talks will take place at the Paranimf Building (Building 3A) and AAMAS technical sessions, workshops, and tutorials will be in the Computer Science School (Escuela Técnica Superior Ingeniería Informática, Building 1G).

The co-located EC conference will take place in Building 3P, from Monday to Wednesday (4th - 6th, June). On Wednesday, plenary and poster sessions will be shared with AAMAS.

Free WiFi access will be available at the Congress Venue (inside all buildings). Connexion instructions will be provided at the Registration Desk.

FLOOR MAPS

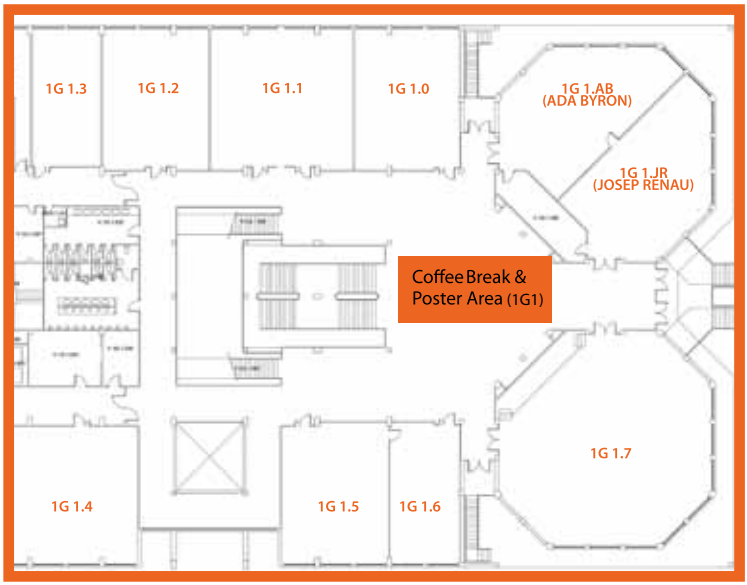
GROUND FLOOR Building 1G



	WORKSHOPS & TUTORIAL				MAIN CONFERENCE				
Room	4 Mor	4 Aft	5 Mor	5 Aft	6 Mor	6 Aft	7 Mor	7 Aft	8 Mor
Registration & Help Desk	REGISTRATION & HELP DESK								
Internet Room	Internet access								
1G0.1	W06	W06	W07	W07	1A	2A	3A	4A	5A
1G0.2	W10	W10	W08	W08					
1G0.4	W02	W02	W11	W11	1B	2B		4B	5B
1G0.5	W04	W04	W04	W17	1C	2C	3C	4C	5C
1G0.6	W17	W17	W09	W09	1D	2D	3D	4D	5D

FLOOR MAPS

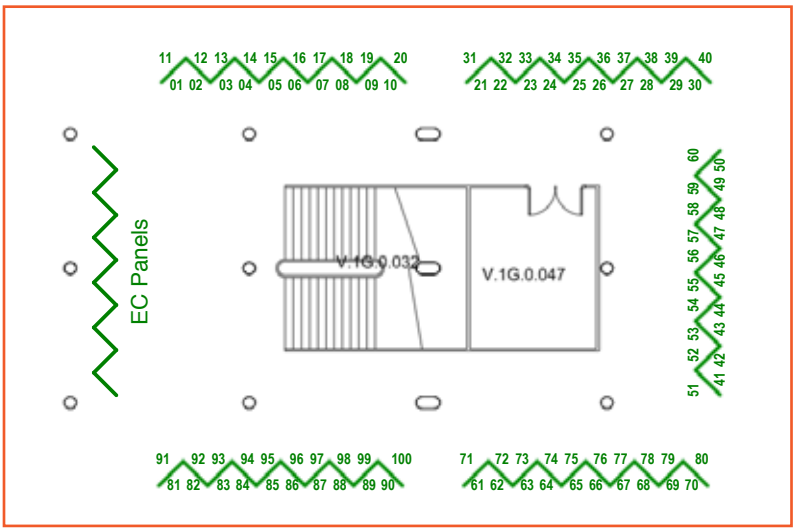
FIRST FLOOR Building 1G



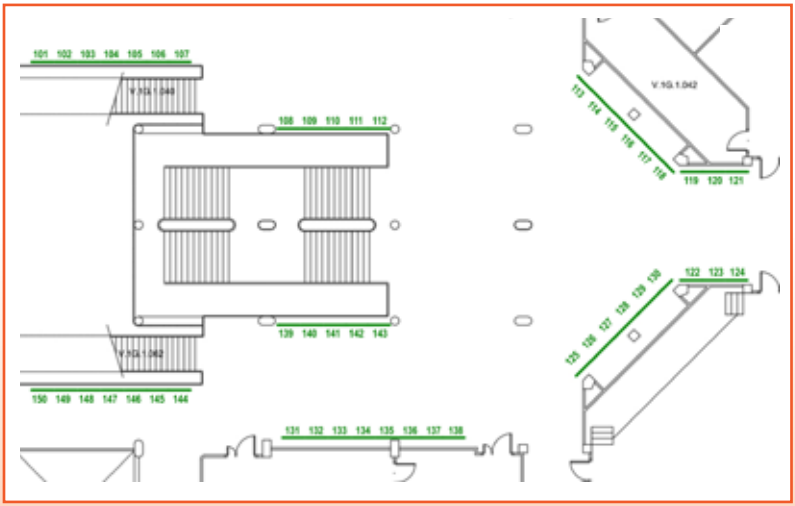
	WORKSHOPS & TUTORIAL				MAIN CONFERENCE				
Room	4 Mor	4 Aft	5 Mor	5 Aft	6 Mor	6 Aft	7 Mor	7 Aft	8 Mor
1G1.0	T01	T01	T03	T03	DEMOs	DEMOs	DEMOs	DEMOs	
1G1.1	T02	T02	T06	T06	DEMOs	DEMOs	DEMOs	DEMOs	
1G1.2	T04	T04	W21	W21	DEMOs	DEMOs	DEMOs	DEMOs	
1G1.3	W13	W13	W18	W18					
1G1.4	W15	W15	W19	W19	1E	2E	3E	4E	5E
1G1.5	W01	W12	W20	W20					
1G1.6	W05	W05	W16	W14					
1G1.7	W22	W22	W03	W03	1F	2F	3F	4F	5F
1G1.AB	T07	T07	T05	T09	Internet access				
1G1.JR	T08	T08	T10	T10					

POSTER DISTRIBUTION

GROUND FLOOR



FIRST FLOOR



DOCTORAL CONSORTIUM MENTORING PROGRAM

TUESDAY, JUNE 5TH

09:00	Welcome
09:10	**Talk 1.** Alice Toniolo
09:30	**Talk 2.** Fabio Panozzo
09:50	**Talk 3.** Ardeshir Kianercy
10:10	**Talk 4.** Zhengyu Yin
10:30	Coffee Break (20 min)
10:50	**Activities: The Elevator Pitch**
11:50	**Talk 5.** Jianing Chen
12:10	**Talk 6.** Iva Bojic
12:30	**Talk 7**. Hui Fang
13:00	Lunch (1 hour)
14:00	**Career Panel**
15:00	**Talk 8.** Prabhu Natarajan
15:20	**Talk 9.** Angela Fabregues
15:40	**Talk 10.** Patricia Gutierrez
16:00	Coffee Break (20 min)
16:20	**Activities: Résumé Workshop**
17:00	**Wrap up**
17:10	**Poster Session** (1 hour)

Crowdsourcing Panel Questions: Please submit questions for the panel during the first coffee break. We will announce where to submit the questions.

Poster Session: The poster session will be run in two 30 minute segments. For the first 30 minutes (until 5:40pm), participants with lastnames A-J should present their posters and the second half hour (5:40-6:10) the participants with lastnames K-Z should present. While you are not presenting, please visit your co-participants posters.

TUTORIALS

MONDAY, JUNE 4TH

T01: Logics and Multi-Agent Programming Languages

Natasha Alechina, Nils Bulling, Mehdi Dastani and Brian Logan

http://www.agents.cs.nott.ac.uk/events/lmapl-12

When designing a multi-agent programming language, researchers and developers must address deep questions such as: what are the basic constituent parts of intelligent agents, the organisation in which they operate, and the environment with which they interact. In particular, how should agents `think' (e.g., which deliberation strategy should they employ -- should an agent plan a precise sequence of actions in advance or should it adopt an abstract plans with gaps `to be filled-in later'), what relationship should there be between the agent's beliefs and its goals, what are the organisational rules and norms that agents should follow, how can an agent decide whether and to which extent it should respect organisational rules and norms, which resources and services in environment should be used, how to devise organisations and environments to ensure specific properties of multi-agent systems, and so on. In seeking to address these questions, researchers have drawn heavily on formal models of agents and on agent logics, including epistemic logics, logics of action, dynamic logic, coalition logics, game theory, etc. For example, the development of agent programming languages such as AgentSpeak(L) and 2APL were heavily influenced by the BDI (Beliefs, Desires and Intentions) logics developed to understand what an agent's behaviour should be. These interactions have resulted in an extremely fruitful cross fertilisation between work in logic and the design of multi-agent programming languages, and the application of logical techniques to address key practical issues such as the verification of agent programs (i.e., will an agent program meet the specification set out by its developers).

This tutorial will address key topics in logics of multi-agent programs including: the Belief Desire Intention model of individual agents; normative models for multi-agent organisations, concurrent game structures for environments, overview of multi-agent programming languages; relationship between the operational semantics of multi-agent programming languages and logics for reasoning about agents' beliefs, intentions, norms, sanctions, and environment interactions; and the verification of multi-agent programs.

(full-day tutorial)

T02: Computational and formal models of cognitive emotions

Mehdi Dastani, Emiliano Lorini and Stacy Marsella

http://www.irit.fr/~Emiliano.Lorini/AAMAS2012/AAMAS2012_tutorialEmotion.html

Emotions play a central role in cognition and in social interaction. Their role and integration into multiagent systems and more generally computerized systems are the subject of a lot of research efforts. One of the aims of the research on emotions in the agent field is to improve human interaction with machines by endowing the latter with the capability of understanding human emotions and generating believable behaviour by means of emotional features (`virtual agents'). Beyond basic emotions such as joy, sadness, fear and hope, a major topic is the analysis of complex emotions types such as counterfactual émotions (e.g. disappointment, regret, guilt) and social emotions (e.g. shame, envy). The tutorial aims at providing an overview of current computational and formal models of emotion proposed in the area of agents and multiagent systems which are used as an abstract specification for the design of articial agents interacting with humans.

(full-day tutorial)

T04: Decision Making in Multiagent Settings

Prashant Doshi, Zinovi Rabinovich, Christopher Amato, Matthijs Spaan, Piotr Gmytrasiewicz

http://www.st.ewi.tudelft.nl/~mtjspaan/tutorialDMMS/

Drawing motivation from search and rescue applications in disaster management, the tutorial will span the range of multiagent interactions of increasing generality, and study a set of optimal and approximate solution techniques to time-extended decision making in these multiagent contexts. This self-contained tutorial will begin with the relevant portions of game theory and culminate with several advanced decision-theoretic models of agent interactions.

(full-day tutorial)

T07: Social Laws for Multi-Agent Systems

Thomas Agotnes, Wiebe van der Hoek and Michael Wooldridge

http://folk.uib.no/nmita/SocialLawsAAMAS2012/

Social laws (or normative systems) have emerged as a natural and powerful paradigm for coordinating multi-agent systems. The social laws paradigm exposes the whole spectrum between fully centralised and fully decentralised coordination mechanisms. A social law is, intuitively, a constraint on the behaviour of agents, which ensures that their individual behaviours are compatible. Typically, a social law is imposed off-line, minimising the chances of on-line conflict or the need to negotiate. The tutorial gives an overview of the state-of-the-art in the use of social laws in multi-agent systems.

(full-day tutorial)

T08: Equilibrium Computation

Nicola Gatti, Troels Bjerre Sørensen

http://home.dei.polimi.it/ngatti/Nicola_Gatti__Teaching__Tutorial_AAMASEC.html

This tutorial aims at providing a gentle introduction to the computational results for non-cooperative game theory. The tutorial will introduce the basics of non-cooperative game theory: mechanisms in strategic and extensive form and strategies, solution concepts and their motivation, and examples of applications. Then, for the most adopted solution concepts, the computational complexity of verifying a solution, finding an equilibrium, and other advanced results (i.e., searching for optimal equilibria or approximate equilibria) will be discussed and subsequently the main algorithms will be presented with some examples of applications. The tutorial will provide basics, well established results, and recent advancements.

(full-day tutorial)

TUESDAY, JUNE 5TH

T03: Multi-agent reinforcement learning (MARL)

Yann-Michaël De Hauwere, Daniel Hennes, Michael Kaisers, Ann Now, Karl Tuyls

https://sites.google.com/site/aamas2012marltutorial/

Participants will learn the core principles of multi-agent reinforcement learning. After a discussion of its challenges, we will explain practical approaches on how to scale single agent reinforcement learning to situations with multiple interacting agents. A framework based on game theory and evolutionary game theory will be used to analyze the learning dynamics, culminating in a taxonomy of learning algorithms. The tutorial will close with a demonstration session, showing the viability of reinforcement learning in several key application domains.

(full-day tutorial)

T05: Agent-Mediated Electronic Negotiation

Valentin Robu, Han La Poutre, Takayuki Ito, Shaheen Fatima

http://users.ecs.soton.ac.uk/vr2/AAMAS12_NegotiationTutorial.htm

This tutorial aims to give a broad overview of state of the art in agent-mediated negotiation. The tutorial will focus on the game-theoretic foundations of electronic negotiations. We review the main concepts from both cooperative and competitive bargaining theory, such as Pareto optimality, the Pareto-efficient frontier as well as utilitarian, Nash and Kalai-Smorodinsky (egalitarian) solution concepts. We discuss and compare games with complete and with incomplete information. Next, we exemplify these concepts through some well-known sequential bargaining games, such as the ultimatum game.

A particular emphasis will be placed on multi-issue (or multi-attribute) negotiation - a research area that has received significant attention in recent years from the multi-agent community. We discuss some of the challenges that arise in modeling negotiations over multiple issues, especially when no information (or only incomplete information) is available about the preferences of the negotiation partner(s), as well as some of the heuristics employed in AI and machine learning research to solve this problem. The second part of the tutorial focuses on multi-issue negotiations which may have realistic limitations like time-constraints, computational tractablility, private information issues, online negotiations, etc.

(half-day tutorial: morning)

T06: Computational Aspects of Cooperative Game Theory

Georgios Chalkiadakis, Edith Elkind, and Michael Wooldridge

http://web.spms.ntu.edu.sg/~eelkind/coopbook/

Cooperative game theory studies the behavior of self-interested agents in strategic settings where binding agreements among agents are possible. We present a survey of work on the computational aspects of cooperative game theory. We begin by formally defining transferable utility games, and introducing key solution concepts for such games. We then discuss two major issues that arise when considering such games from a computational perspective: identifying compact representations for games, and the closely related problem of efficiently computing solution concepts for games. We survey several formalisms for cooperative games that have been proposed in the literature. We briefly discuss games with non-transferable utility and partition function games. We then overview algorithms for identifying welfare-maximizing coalition structures and methods used by rational agents to form coalitions (even under uncertainty), including bargaining algorithms. We conclude by considering applications and future research directions. The tutorial is closely based our new textbook with the same title: http://web.spms.ntu.edu.sg/~eelkind/coopbook/.

(full-day tutorial)

T10: Game Theory and Security

Quanyan Zhu, Manish Jain, M. H. Manshaei, James Pita, Rong Yang, and Zhengyu Yin

https://wiki.engr.illinois.edu/display/gamesectutorial/

Game theory is an increasingly important paradigm for modeling security games and decision-making in these domains, including homeland security resource allocation decisions, robot patrolling strategies, and computer network security. This tutorial introduces a wide variety of game-theoretic modeling techniques and algorithms that have been developed in recent years for security problems, and it provides a structured and comprehensive overview of research on security and privacy in computer networks and cyber-physical systems that uses game-theoretic approaches. We present a selected set of works to highlight the application of game theory in addressing different forms of security and privacy problems in communication networks, mobile applications and cyber-physical systems.

(full-day tutorial)

T09: Designing Computer Agents for Human-Computer Decision-Making

Ya'akov (Kobi) Gal and Sarit Kraus

http://www.eecs.harvard.edu/~gal/hcdm12.html

Settings in which humans and computers make decisions together are becoming increasingly prevalent (e.g., electronic commerce, intelligent tutors, office assistants, negotiation training). How to design effective computer agents in these settings requires understanding the social and psychological factors that affect human behavior, which often transcend our formal models of a "rational" actor. This half-day tutorial will focus on computational representations, algorithms and empirical methodologies for meeting this challenge. It will (1) present historical and contemporary views on human decision-making from behavioral economics and cognitive psychology, (2) show how these results can inform computational models of behavior, and (c) present empirical methodologies for facilitating the design and evaluation of computational strategies in different types of environments.

(half-day tutorial: afternoon)

WORKSHOPS

MONDAY, JUNE 4TH

W01: AAHC / Agents Applied in Health Care (AAHC)

http://deim.urv.cat/~itaka/workshops/aamas2012/

This seventh edition of the Workshop on Agents Applied in Health Care will address the main issues related to the design and application of agent technology to health care problems. Topics of interest include, but are not restricted to, remote care delivery, agent-based decision support systems in health care, distributed patient scheduling, and agent-based health care simulation and modelling. Papers that describe deployed applications of health care systems based on cooperative agents are particularly welcome.

(half-day workshop: morning)

W02: ACAN / Agent-based Complex Automated Negotiations

http://www2.uah.es/acan2012/

Complex Automated Negotiations have been widely studied and have become an emerging area in the field of Autonomous Agents and Multi-Agent Systems. These issues are being explored by researchers from different communities in Autonomous Agents and Multi-Agent systems.

The goal of this workshop is to bring together researchers from these communities to learn about each others' approaches, form long-term collaborations, and cross-fertilize the different areas to accelerate progress towards scaling up to larger and more realistic applications.

(full-day workshop)

W04: ALA / Adaptive and Learning Agents

http://como.vub.ac.be/ALA2012/

Adaptive Learning Agents encompasses diverse fields such as Computer Science, Software Engineering, Biology, as well as Cognitive and Social Sciences. The ALA workshop will focus on agents and multiagent systems which employ learning or adaptation. The workshop will serve as an inclusive forum for the discussion of ongoing or completed work in both theoretical and practical issues of adaptive and learning agents and multiagent systems. This workshop will focus on all aspects of adaptive and learning agents and multiagent systems with a particular emphasis on how to modify established learning techniques and/or create new learning paradigms to address the many challenges presented by complex real-world problems.

(full-day and a half workshop)

W05: AOSE / Agent-Oriented Software Engineering

http://winf.in.tu-clausthal.de/events/aose12/

Since the early 1990s, multi-agent system researchers have developed a large body of knowledge on the foundations and engineering principles for designing and developing agent-based systems. The 12 past editions of the agent-oriented software engineering workshop (AOSE) had a key role in this endeavor. For 2012, the workshop organizers and the steering committee propose to organize an edition of AOSE workshop aimed at exploring the new role emerging of agent-oriented software engineering as a bridge from the now consolidated agent oriented programming languages and platforms, to recent systems modelling paradigms like self-*, autonomic systems, and systems of systems (SoS). Thus, it is our hope to explore in this workshop, from an agent-based perspective, foundations, models, methods, architectures, and tools for engineering future software-intensive IT eco-systems.

(full-day workshop)

W06: ArgMAS / Argumentation in Multiagent Systems

http://www.mit.edu/~irahwan/argmas/argmas12/

The main goal of ArgMAS 2012 is to bring together the community of researchers working on argumentation in multi-agent systems. The workshop will focus on the concepts, theories, methodologies, and applications of computational models of argument in creating autonomous agents and multi-agent systems. Argumentation can be abstractly defined as the formal interaction of different arguments for and against some conclusion (eg, a proposition, an action intention, a preference, etc). A single agent may use argumentation techniques to perform individual reasoning, to resolve conflicting evidence, or to decide between conflicting goals. Multiple agents may also use dialectical argumentation in order to identify and reconcile differences between themselves, through interactions such as negotiation, persuasion, and joint deliberation.

(full-day workshop)

W10: CAVE / Cognitive Agents in Virtual Environments

http://www.staff.science.uu.nl/~dignu101/CAVE12/

The CAVE workshop is meant to connect people that are working on the use of agent technology in virtual environments. Within the agent community there is a lot of work done on multi-agent systems, both theoretical as well as practical. Such properties as communication, team work, coordination and cooperation of agents are important if agents are to interact effectively with each other and human participants in all sorts of virtual activity such as serious gaming. We want to explore how these results might be used to support these interactions and which extra requirements should be imposed for this context.
Finally, the workshop would like to promote the testing and evaluation of practical agent frameworks to establish which framework is most appropriate for different types of games or other virtual applications.

(full-day workshop)

W13: DALT / Declarative Agent Languages and Technologies

http://www.di.unito.it/~baldoni/DALT-2012/

The workshop on Declarative Agent Languages and Technologies (DALT), in its tenth edition this year, is a well-established forum for researchers interested in sharing their experiences in combining declarative and formal approaches with the engineering and technological aspects of agents and multiagent systems. DALT aims at providing a discussion forum to both (i) support the transfer of declarative paradigms and techniques to the broader community of agent researchers and practitioners, and (ii) to bring the issue of designing complex agent systems to the attention of researchers working on declarative languages and technologies.

(full-day workshop)

W15: HAIDM / Human-Agent Interaction Design and Models

https://sites.google.com/site/humanagentsystems

As the boundaries of autonomous agents and multi-agent systems continue to expand, there is an increasing need for agents to interact with humans. In fact, the field of multi-agent systems has matured from conceptual models to applications within the real-world (e.g., Engergy and sustainability, disaster management, or health care). One significant challenge that arises when transitioning these conceptual models to applications is addressing the inevitable human interaction. To this end, this workshop examines major challenges at the intersection of human-agent systems. The workshop will be divided into two key tracks in order to reflect the main research directions taken in the community, namely Human-Agent Interaction (HAI) and Modelling Agent Systems with Humans (MASH). While the former is takes a human-centric view of human-agent systems and focuses on the design of human-agent coordination mechanisms, trust issues in human-agent interaction, interaction techniques, and human activity recognition, the latter is concerned with finding better models of human behavior in a variety of settings so that autonomous and multi-agent systems can appropriately interact with human agents (e.g., agent-human negotiation strategies or health care agents encouraging physical therapy for a variety of recovering patients). Hence, this workshop aims to establish a forum for researchers to discuss common issues that arise in designing and modeling human-agent interaction in different domains.

(full-day workshop)

W17: MABS / Multi-Agent Based Simulation

http://www.irit.fr/mabs2012/

The Multi-Agent-Based Simulation (MABS) workshop is the thirteenth of a series that began in 1998. The workshop will provide a forum for social scientists, agent researchers and developers, and simulation researchers, to assess the current state of the art in the modeling and simulation of social systems and MAS, to identify where existing approaches can be successfully applied, to learn about new approaches and explore future research challenges, and to promote exchanges in an inter-disciplinary environment.

(full-day and a half workshop)

W22: TADA/AMEC / Joint Workshop on Trading Agent Design and Analysis and Agent-Mediated Electronic Commerce

http://www.cs.utep.edu/kiekintveld/Workshops/TADAAMEC12.html

The design and analysis of electronic commerce systems and automated trading agents is a prominent area of research in artificial intelligent and multi-agent systems. Research in this area includes methods for designing both agents and market institutions, and makes of of a wide variety of AI techniques including planning, decision theory, game theory, machine learning, and optimization. The scope of the workshop includes descriptions of agent architectures, decision-making algorithms, theoretical analysis of market institutions and agents, empirical studies of agent performance or e-commerce systems, negotiation and contracting strategies, game theoretic analysis, mechanism design and other related topics.

(full-day workshop)

W12: CoopMAS / Cooperative Games in Multiagent Systems

http://staff.science.uva.nl/~stephane/coopmas12/

The use of cooperative game theory to study how agents should cooperate and collaborate, along with the related topic of coalition formation, has received growing attention from the multiagent systems, game theory, and electronic commerce communities. The focus of much of the current work in this area has been on exploring methods by which agents can form coalitions so as to solve problems of joint interest, make group decisions, and distribute gains arising from such cooperation.

(half-day workshop: afternoon)

TUESDAY, JUNE 5TH

W03: ADMI : Agents and Data Mining Interaction

http://admi12.agentmining.org

The ADMI workshop provides a premier forum for sharing research and engineering results, as well as potential challenges and prospects encountered in the respective communities and the coupling between agents and data mining. The workshop welcomes theoretical work and applied dissemination aiming to: (1) exploit agent-enriched data mining and demonstrate how intelligent agent technology can contribute to critical data mining problems in theory and practice; (2) improve data mining-driven agents and show how data mining can strengthen agent intelligence in research and practical applications; (3) explore the integration of agents and data mining towards a super-intelligent system; (4) discuss existing results, new problems, challenges and impact of integration of agent and data mining technologies as applied to highly distributed heterogeneous, including mobile, systems operating in ubiquitous and P2P environments; and (5) identify challenges and directions for future research and development on the synergy between agents and data mining.

(full-day workshop)

W07: ARMS / Autonomous Robots and Multirobot Systems

http://mmi.tudelft.nl/arms2012

Robots are agents, too. Indeed, agent researchers are sometimes inspired by robots, sometimes use robots in motivating examples, and sometimes make contributions to robotics. Both practical and analytical techniques in agent research influence, and are being influenced by, research into autonomous robots and multi-robot systems. Despite the significant overlap between the multiagent and robotics research areas, roboticists and agents researchers have only a few opportunities to meet and interact. The recently established robotics track at AAMAS is one such opportunity. The goal of the proposed workshop is to extend and widen this opportunity, by offering a forum where researchers in this area of research can interact and present promising innovative research directions, and new results. The workshop is coordinated and associated with the AAMAS robotics track.

(full-day workshop)

W08: ATES / Agent Technologies for Energy Systems

http://www.ates2012.org/

The Agent Technologies for Energy Systems workshop provides a forum for researchers and practitioners seeking to apply agent technologies within future energy systems such as the smart grid.

(full-day workshop)

W09: ATT / Agent in Traffic and Transportation

http://www.ia.urjc.es/att2012/

Building effective and user-friendly transportation systems is one of the big challenges for engineers in the 21st century. The purpose of this workshop is to bring researchers and practitioners together in order to set up visions on how agent technology can be and is used for today's isolated IT-tools so as to model, simulate, and manage large-scale complex transportation systems. Therefore, we are interested in research papers, case studies and practitioners' reports on the implementation and use of Autonomous Agents in all areas related to transportation, traffic and logistics. Besides running real-world applications, we are also interested in papers concerning demonstrators or testbed that are still under development. Conceptual papers and those reporting on particular components of transportation systems are also welcome.

(full-day workshop)

W11: COIN / Coordination, Organization, Institutions and Norms

http://ict1.tbm.tudelft.nl/coin2012/

Coordination, Organizations, Institutions and Norms are four key governance elements for the regulation of open multi-agent systems. The COIN workshop aims to bring together researchers in autonomous agents and multi-agent systems working on the scientific and technological aspects of organizational theory, electronic institutions and computational economies from an organizational and institutional perspective. Besides the regular topics, the 14th version of COIN focusses on research from the field of cloud computing; with a special interest in topics such as the organization of cloud computing, and using cloud computing for large scale multi-agent organizations.

(full-day workshop)

W16: LAMAS / Logical Aspects of Multi-Agent Systems

http://icr.uni.lu/lamas2012/

The workshop will provide an annual meeting forum for the research community working on various logical aspects of MAS from the perspectives of logic, artificial intelligence, computer science, and game theory. It will address the whole range of issues that arise in the context of using logic in MAS, from theoretical foundations to algorithmic methods and implemented tools. LAMAS'2012 will be the main annual event of the LAMAS research network and will continue the series of annual LAMAS workshops.

(half-day workshop: morning)

W18: MSDM / Multiagent Sequential Decision Making Under Uncertainty

http://gaips.inesc-id.pt/~switwicki/msdm2012/

In sequential decision making, an agent's objective is to choose actions, based on its observations of the world, that will maximize its performance over the course of a series of such decisions. The MSDM workshop focuses on extensions of principled single-agent models (e.g., MDPs and POMDPs) and methods (e.g., planning and learning) to systems of multiple agents. Over the past decade, a variety of different multiagent models have emerged for cooperative agents (e.g., the MMDP, Dec-POMDP, and MTDP) as well as for self-interested agents (e.g., the I-POMDP and POSG). The purpose of this workshop is to bring together researchers in the field of multiagent sequential decision making to present and discuss promising new work, to identify recent trends in model and algorithmic development, and to establish important directions and goals for further research and collaboration. In the long term, the active discussions that the MSDM workshop promotes will help us to overcome the challenges of applying multiagent sequential decision making methods to large-scale real-world problems in, for instance, security, sustainability, public safety and health.

(full-day workshop)

W19: OptMAS / Optimisation in Multi-Agent Systems

http://sites.google.com/site/optmas2012/

The number of novel applications of multi-agent systems has followed an exponential trend over the last few years, ranging from online auction design, through multi-sensor networks, to scheduling of tasks in multi-actor systems. Multi-agent systems designed for all these applications generally involve some form of very hard optimization problems that are substantially different from problems traditionally dealt with in other areas (e.g., industrial processes or scheduling applications). This workshop invites works from different strands of the multi-agent systems community that pertain to the design of algorithms, models, and techniques to deal with multi-agent optimisation problems. In so doing, this workshop aims to provide a forum for researchers to discuss common issues that arise in solving optimisation problems in different areas and elaborate common benchmarks to test their solutions.

(full-day workshop)

W20: ProMAS / Programming in Multiagent Systems

http://www.agents.cs.nott.ac.uk/events/promas2012

Now in its 10th edition, ProMAS has proved to be an invaluable venue for bringing together leading researchers from both academia and industry to discuss key issues in the design of programming languages and tools for multi-agent systems. In particular, the workshop promotes the discussion and exchange of techniques, concepts, requirements and principles central to multi-agent programming technology. These include the theory and application of agent programming languages, how to effectively implement a multi-agent system specification or design, the verification and analysis of agent systems, as well as the implementation of social structures in agent-based systems (e.g., organisations, coordination, and communication in multi-agent systems).

(full-day workshop)

W21: SCW / Spatial Computing Workshop

http://www.spatial-computing.org/scw12:start

In the field of distributed systems, space plays various important roles, ranging from computational resource (e.g., parallelism) to the result of the computation itself (e.g., formation control or self-assembly). For example, in multiagent-based systems, spatial relationships are often used to organize the interactions between agents, at least in applications in which the problem and the space are intertwined. Furthermore, multiagent-based systems and their behaviors can be specified and analyzed relying on spatial notions like: location, neighborhood, diffusion, propagation, etc. The goal of the 5th Spatial Computing Workshop is to serve as an inclusive forum for the discussion of ongoing or completed work focusing on the theoretical and practical issues of explicitly using space in the design process of multiagent or multiactor systems. We invite researchers to explore spatial computing in the context of multiagent-based systems at different abstraction levels, ranging from relevant concepts and theories for the top-down specification of spatial applications, to suitable methodologies and tools, and novel spatial applications.

(full-day workshop)

W23: TRUST / Trust in Agent Societies

http://t3.istc.cnr.it/trustwiki/index.php/Call_for_papers_-_15th_International_Workshop_on_Trust_in_Agent_Societies_(TRUST12)

Trust and Trustworthiness (along with related concepts such as privacy, reputation, security, control) have become major research topics in computer science. The aim of the workshop is to bring together researchers (even from different disciplines) who can contribute to a better understanding of trust and reputation in agent societies. We seek papers that address trust as it arises in any kind of interaction among social agents (human-human, human-computer, human-human through computers, computer-computer). Applications are of interest, especially in e-commerce, e-health, and e-governement. We welcome computational and theoretical models and approaches to trust as well as applications and empirical studies on trust. This edition of the workshop will emphasize the theme of "Trust and Agreement".

(full-day workshop)

W14: EEA / Emotional and Empathic Agents

http://gaips.inesc-id.pt/aamas12-wseea/

The main goal of this workshop is to bring together researchers from different disciplines to discuss the creation of what we call "empathic agents". Empathy has been associated with the processes that make a person to have "feelings that are more congruent with another's situation than with his own situation". Humans, when interacting with virtual agents or robots can be led to feel empathy, and experience a diverse set of emotional reactions. On the other hand, agents and robots can in a certain, perhaps limited way, also show certain emotions in reaction to human emotions, thus seemingly expressing empathy towards other agents and towards humans. Further, agents interacting in social simulation scenarios may react to the other agents in a way that is more congruent with the other's. Thus, by seeking inspiration in empathic relations established between humans and between humans and animals, in this workshop we expect to explore these dimensions of empathic agents.

(half-day workshop:afternoon)

TECHNICAL SESSIONS

WEDNESDAY, JUNE 6TH

9:00-9:20	**Welcome & Official Opening**	Paranimf
9:20-10:20	**Invited Talk**	Paranimf

"Lab and field evidence of a cognitive hierarchy in strategic thinking"
Prof. Colin Camerer

10:20-11:20 **Coffee Break + Posters + Demos**

Poster Sesssion 1

Extended Abstracts:
71, 84, 99, 103, 126, 143, 189, 194, 207, 214, 232, 243, 322, 382, 396, 425, 430, 449, 455, 456, 473, 498, 515, 527, 567, 620, 627, 672, 682, 709, 734, 776, 778, 798, 817

Full Papers:
13, 16, 24, 65, 118, 120, 127, 193, 245, 252, 280, 300, 336, 347, 381, 384, 397, 446, 499, 561, 564, 570, 590, 604, 608, 618, 655, 663, 711, 718, 744, 761, 806, 812, 822

Demo Session 1 (morning)
Demos: 01,02,03,04,05,06,07,08,09,10,11,12,13,14

11:20-13:00 **Session 1**

1A Innovative Applications (Chair: Klaus Fischer) 1G 0.1

13: PROTECT: A Deployed Game Theoretic System to Protect the Ports of the United States [IA]
Eric Shieh, Bo An, Rong Yang, Milind Tambe, Craig Baldwin, Joseph DiRenzo, Ben Maule, Garrett Meyer

118: SAVES: A Sustainable Multiagent Application to Conserve Building Energy Considering Occupants [IA]
Jun-young Kwak, Pradeep Varakantham, Rajiv Maheswaran, Milind Tambe, Farrokh Jazizadeh, Geoffrey Kavulya, Laura Klein, Burcin Becerik-Gerber, Timothy Hayes, Wendy Wood

347: Active Malware Analysis using Stochastic Games [IA]
Simon Williamson, Pradeep Varakantham, Debin Gao, Ong Chen Hui

384: Agents vs. Pirates: Multi-agent Simulation and Optimization to Fight Maritime Piracy [IA]
Michal Jakob, Ondřej Vaněk, Ondřej Hrstka, Michal Pěchouček

718: Improving Building Energy Efficiency with a Network of Sensing, Learning and Prediction Agents [IA]
Sunil Mamidi, Yu-Han Chang, Rajiv Maheswaran

1B Teamworks (Chair: Frank Dignum) 1G 0.4

24: Coordination Guided Reinforcement Learning
Qiangfeng Peter Lau, Mong Li Lee, Wynne Hsu

446: On Coalition Formation with Sparse Synergies
Thomas Voice, Sarvapali Ramchurn, Nick Jennings

564: Decentralised Channel Allocation and Information Sharing for Teams of Cooperative Agents
Sebastian Stein, Simon Williamson, Nick Jennings

711: A New Approach to Betweenness Centrality Based on the Shapley Value
Piotr Szczepański, Tomasz Michalak, Talal Rahwan

744: Maintaining Team Coherence under the Velocity Obstacle Framework
Andrew Kimmel, Andrew Dobson, Kostas Bekris

1C Learning (Chair: Kagan Turner) 1G 0.5

193: V-MAX: Tempered Optimism for Better PAC Reinforcement Learning
Karun Rao, Shimon Whiteson

245: Reinforcement Learning Transfer via Sparse Coding
Haitham Bou Ammar, Karl Tuyls, Matthew Taylor, Kurt Driessen, Gerhard Weiss

280: Learning in a Small World
Arun Tejasvi Chaganty, Prateek Gaur, Balaraman Ravindran

127: Just Add Pepper: Extending Learning Algorithms for Repeated Matrix Games to Repeated Markov Games
Jacob Crandall

570: Strong Mitigation: Nesting Search for Good Policies Within Search for Good Reward
Jeshua Bratman, Satinder Singh, Richard Lewis, Jonathan Sorg

1D Social Choice (Chair: Francesca Rossi) 1G 0.6

604: Strategyproof Approximations of Distance Rationalizable Voting Rules
Travis Service, Julie Adams

561: Campaigns for Lazy Voters: Truncated Ballots
Dorothea Baumeister, Piotr Faliszewski, Jérôme Lang, Jörg Rothe

252: Possible and Necessary Winners of Partial Tournaments
Haris Aziz, Markus Brill, Felix Fischer, Paul Harrenstein, Jérôme Lang, Hans Georg Seedig

608: Communication Complexity of Approximating Voting Rules
Travis Service, Julie Adams

1E Game Theory (Chair: Onn Shehory) 1G 1.4

16: Existence of Stability in Hedonic Coalition Formation Games
Haris Aziz, Florian Brandl

65: Stablity Scores: Measuring Coalitional Stability
Michal Feldman, Reshef Meir, Moshe Tennenholtz

120: Coalitional Stability in Structured Environments
Georgios Chalkiadakis, Vangelis Markakis, Nick Jennings

381: Overlapping Coalition Formation Games: Charting the Tractabilit Frontier
Yair Zick, Georgios Chalkiadakis, Edith Elkind

822: Handling Negative Value Rules in MC-net-based Coalition Structure Generation
Suguru Ueda, Takato Hasegawa, Naoyuki Hashimoto, Naoki Ohta, Atsushi Iwasaki, Makoto Yokoo

1F Planning (Chair: Cees Witteveen) 1G 1.7

300: Probabilistic Planning with Non-Linear Utility Functions and Worst-Case Guarantees
Stefano Ermon, Carla Gomes, Bart Selman, Alexander Vladimirsky

336: Heuristic Search of Multiagent Influence Space
Stefan Witwicki, Frans Oliehoek, Leslie Kaelbling

655: A Hierarchical Goal-Based Formalism and Algorithm for Single-Agent Planning
Vikas Shivashankar, Ugur Kuter, Dana Nau, Ron Alford

663: DiscoverHistory: Understanding the Past in Planning and Execution
Matthew Molineaux, Ugur Kuter, Matthew Klenk

812: Time Bounded Adaptive A*
Carlos Hernández, Jorge Baier, Tansel Uras, Sven Koenig

14:20-16:00 **Session 2**

2A Virtual Agents (Chair: Ana Paiva) 1G 0.1

163: Bayesian Model of the Social Effects of Emotion in Decision-Making in Multiagent Systems
Celso de Melo, Peter Carnevale, Stephen Read, Dimitrios Antos, Jonathan Gratch

176: Towards building a Virtual Counselor: Modeling Nonverbal Behavior during Intimate Self-Disclosure
Sin-Hwa Kang, Jonathan Gratch, Candy Sidner, Ron Artstein, Lixing Huang, Louis-Phillippe Morency

183: A Sequential Recommendation Approach for Interactive Personalized Story Generation
Hong Yu, Mark Riedl

318: Evaluating the Models & Behaviour of 3D Intelligent Virtual Animals in a Predator-Prey Relationship
Deborah Richards, Michael J. Jacobson, John Porte, Charlotte Taylor, Meredith Taylor, Anne Newstead, Iwan Kelaiah, Nader Hanna

378: Model of the Perception of Smiling Virtual Character
Magalie Ochs, Catherine Pelachaud

2B Distributed Problem Solving (Chair: Cees Witteveen) 1G 0.4

54: Stochastic Dominance in Stochastic DCOPs for Risk Sensitive Applications
Duc Thien Nguyen, William Yeoh, Hoong Chuin Lau

200: Max/Min-sum Distributed Constraint Optimization through Value Propagation on an Alternating DAG
Roie Zivan, Hilla Peled

277: Improving BnB-ADOPT$^+$-AC
Patricia Gutiérrez, Pedro Meseguer

428: Optimal Decentralised Dispatch of Embedded Generation in the Smart Grid [IA]
Sam Miller, Sarvapali Ramchurn, Alex Rogers

467: DCOPs and Bandits: Exploration and Exploitation in Decentralised Coordination
Ruben Stranders, Long Tran-Thanh, Francesco Maria Delle Fave, Alex Rogers, Nick Jennings

2C Learning II (Chair: Sherief Abdallah) 1G 0.5

89: Decentralized Bayesian Reinforcement Learning for Online Agent Collaboration
Luke Teacy, Georgios Chalkiadakis, Alessandro Farinelli, Alex Rogers, Nick Jennings, Sally McClean, Gerard Parr

170: Shaping Fitness Functions for Coevolving Cooperative Multiagent Systems
Mitchell Colby, Kagan Tumer

215: Dynamic Potential-Based Reward Shaping
Sam Devlin, Daniel Kudenko

343: Learning and Predicting Dynamic Networked Behavior with Graphical Multiagent Models
Quang Duong, Michael Wellman, Satinder Singh, Michael Kearns

2D Social Choice II (Chair: Francesca Rossi) 1G 0.6

75: Lot-based Voting Rules
Toby Walsh, Lirong Xia

226: Convergence of Iterative Voting
Omer Lev, Jeffrey Rosenschein

418: Optimal Manipulation of Voting Rules
Svetlana Obraztsova, Edith Elkind

416: Manipulation Under Voting Rule Uncertainty
Edith Elkind, Gábor Erdélyi

244: Voter Response to Iterated Poll Information
Annemieke Reijngoud, Ulle Endriss

2E Game Theory II (Chair: Takayuki Ito) 1G 1.4

198: Short Sight in Extensive Games
Davide Grossi, Paolo Turrini

399: New Results on the Verification of Nash Refinements for Extensive-Form Games
Nicola Gatti, Fabio Panozzo

481: Playing Repeated Stackelberg Games with Unknown Opponents
Janusz Marecki, Gerry Tesauro, Richard Segal

545: A Framework for Modeling Population Strategies by Depth of Reasoning
Michael Wunder, Michael Kaisers, John Robert Yaros, Michael Littman

726: Efficient Nash Equilibrium Approximation through Monte Carlo Counterfactual Regret Minimization
Michael Johanson, Nolan Bard, Marc Lanctot, Richard Gibson, Michael Bowling

2F Knowledge Representation & Reasoning (Chair: Mike Huhns) 1G 1.7

334: Memory Formation, Consolidation, and Forgetting in Learning Agents
Budhitama Subagdja, Wenwen Wang, Ah-Hwee Tan, Yuan-Sin Tan, Loo-Nin Teow

630: Improved Use of Partial Policies for Identifying Behavioral Equivalence
Yifeng Zeng, Yinghui Pan, Hua Mao, Jian Luo

518: Learning and Reasoning about Norms using Neural-Symbolic Systems
Guido Boella, Silvano Colombo Tosatto, Artur d'Avila Garcez, Valerio Genovese, Perotti Alan, Leendert van der Torre

351: On Supervising Agents in Situation-Determined ConGolog
Giuseppe De Giacomo, Yves Lespérance, Christian Muise

731: Generalized and Bounded Policy Iteration for Finitely-Nested Interactive POMDPs: Scaling Up
Ekhlas Sonu, Prashant Doshi

16:00-17:00 **Coffee Break + Poster + Demos**

Poster Session 2

Extended abstracts:
26, 35, 39, 45, 67, 100, 107, 144, 147, 178, 229, 265, 266, 284, 354, 380, 402, 404, 433, 462, 479, 517, 529, 553, 557, 563, 585, 634, 666, 667, 679, 685, 730, 783, 826, 829

Full papers:
54, 75, 89, 163, 170, 176, 183, 198, 200, 215, 226, 238, 244, 277, 318, 334, 343, 351, 378, 399, 416, 418, 428, 467, 481, 494, 518, 545, 554, 630, 641, 722, 726, 731, 803

Demo Session 1 (afternoon)
Demos: 01,02,03,04,05,06,07,08,09,10,11,12,13,14

17:00-18:00 **ACM/SIGART Autonomous Agents Research Award Talk** Paranimf

"Social Contexts"
Prof. Moshe Tennenholtz

THURSDAY, JUNE 7TH

9:20-10:20 **Invited Talk** Paranimf

"Delivering the Smart Grid: A Grand Challenge for Autonomous Agents Research"
Dr. Alex Rogers

10:20-11:20 **Coffee Break + Poster + Demos**

Poster Session 3

Extended abstracts:
28, 34, 53, 68, 152, 154, 157, 166, 171, 172, 188, 218, 249, 259, 263, 269, 289, 309, 326, 357, 363, 405, 419, 437, 463, 522, 556, 568, 575, 587, 632, 642, 757, 772, 789

Full papers:
12, 32, 62, 70, 73, 90, 121, 159, 161, 181, 204, 206, 222, 233, 251, 278, 328, 348, 392, 406, 465, 484, 486, 504, 535, 559, 638, 654, 695, 707, 737, 738, 742, 758, 797

Demo Session 2 (morning)
Demos: 15,16,17,18,19,20,21,22,23,24,25,26,27,28

11:20-13:00 **Session 3**

3A Robotics (Chair: Sven Koenig) 1G 0.1

806: UT Austin Villa 2011: A Champion Agent in the RoboCup 3D Soccer Simulation Competition
Patrick MacAlpine, Daniel Urieli, Samuel Barrett, Shivaram Kalyanakrishnan, Francisco Barrera, Adrián López-Mobilia, Nicolae Ştiurcă, Victor Vu, Peter Stone

206: Decentralized Active Robotic Exploration and Mapping for Probabilistic Field Classification in Environmental Sensing
Kian Hsiang Low, Jie Chen, John Dolan, Steve Chien, David Thompson

392: Robot Exploration with Fast Frontier Detection: Theory and Experiments
Matan Keidar, Gal Kaminka

707: Dynamic Reconfiguration in Modular Robots using Graph Partitioning-based Coalitions
Prithviraj Dasgupta, Vladimir Ufimtsev, Carl Nelson, S. G. M. Hossain

121: Supervised Morphogenesis - Morphology Control of Ground-based Self-Assembling Robots by Aerial Robots
Nithin Mathews, Alessandro Stranieri, Alexander Scheidler, Marco Dorigo

3C Human-agent Interaction (Chair: Sarvapali Ramchurn) 1G 0.5

70: A Cultural Sensitive Agent for Human-Computer Negotiation
Galit Haim, Ya'akov (Kobi) Gal, Sarit Kraus, Michele Gelfand

233: Giving Advice to People in Path Selection Problems
Amos Azaria, Zinovi Rabinovich, Sarit Kraus, Claudia Goldman, Omer Tsimhoni

695: Combining Human and Machine Intelligence in Large-scale Crowdsourcing
Ece Kamar, Severin Hacker, Eric Horvitz

733: Reinforcement Learning from Simultaneous Human and MDP Reward
W. Bradley Knox, Peter Stone

328: Automatic Task Decomposition and State Abstraction from Demonstration
Luis C. Cobo, Charles L. Isbell Jr., Andrea Thomaz

3D Economies and Markets (Chair: Takayuki Ito) 1G 0.6

161: Rational Market Making with Probabilistic Knowledge
Abraham Othman, Tuomas Sandholm

251: Can a Zero-Intelligence Plus model Explain the Stylized Facts of Financial Time Series Data?
Imon Palit, Steve Phelps, Wing Lon Ng

535: A Scoring Rule-based Mechanism for Aggregate Demand Prediction in the Smart Grid
Harry Rose, Alex Rogers, Enrico Gerding

559: A Model-Based Online Mechanism with Pre-Commitment and its Application to Electric Vehicle Charging
Sebastian Stein, Enrico Gerding, Valentin Robu, Nick Jennings

797: Efficient Crowdsourcing Contests
Ruggiero Cavallo, Shaili Jain

3E Game Theory III (Chair: Nicola Gatti) 1G 1.4

12: Computing Optimal Strategy against Quantal Response in Security Games
Rong Yang, Fernando Ordóñez, Milind Tambe

73: A Unified Method for Handling Discrete and Continuous Uncertainty in Bayesian Stackelberg Games
Zhengyu Yin, Milind Tambe

654: Multi-Objective Optimization for Security Games
Matthew Brown, Bo An, Christopher Kiekintveld, Fernando Ordóñez, Milind Tambe

737: Strategy Purification and Thresholding: Effective Non-Equilibrium Approaches for Playing Large Games
Sam Ganzfried, Tuomas Sandholm, Kevin Waugh

758: Solving Non-Zero Sum Multiagent Network Flow Security Games with Attack Costs
Steven Okamoto, Noam Hazon, Katia Sycara

3F Agent-based Software Development (Chair: Koen Hindriks) 1G 1.7

348: Measuring Plan Coverage and Overlap for Agent Reasoning
John Thangarajah, Sebastian Sardina, Lin Padgham

406: Programming Norm-Aware Agents
Natasha Alechina, Mehdi Dastani, Brian Logan

465: Metamodel-Based Metrics for Agent-Oriented Methodologies
Noélie Bonjean, Antonio Chella, Massimo Cossentino, Marie-Pierre Gleizes, Frédéric Migeon, Valeria Seidita

32: Comma: A Commitment-Based Business Modeling Methodology and its Empirical Evaluation
Pankaj Telang, Munindar Singh

222: Revising Conflicting Intention Sets in BDI Agents
Steven Shapiro, Sebastian Sardina, John Thangarajah, Lawrence Cavedon, Lin Padgham

14:20-16:00 **Session 4**

4A Robotics II (Chair: Elizabeth Sklar) 1G 0.1

123: Property-driven design for swarm robotics
Manuele Brambilla, Carlo Pinciroli, Mauro Birattari, Marco Dorigo

426: Multi-robot collision avoidance with localization uncertainty
Daniel Hennes, Daniel Claes, Wim Meeussen, Karl Tuyls

434: Decision-Theoretic Approach to Maximizing Observation of Multiple Targets in Multi-Camera Surveillance [IA]
Prabhu Natarajan, Trong Nghia Hoang, Kian Hsiang Low, Mohan Kankanhalli

614: Segregation in Swarms of e-puck Robots Based On the Brazil Nut Effect
Jianing Chen, Melvin Gauci, Michael J. Price, Roderich Groß

656: Model-Driven Behavior Specification for Robotic Teams
Alexandros Paraschos, Nikolaos Spanoudakis, Michail Lagoudakis

4B Agent Societies (Chair: Juan Antonio Rodriguez) 1G 0.4

323: A Multiagent Evolutionary Framework based on Trust for Multiobjective Optimization
Siwei Jiang, Jie Zhang, Yew-Soon Ong

488: A qualitative reputation system for multiagent systems with protocol-based communication
Emilio Serrano, Michael Rovatsos, Juan Botia

717: PRep: A Probabilistic Reputation Model for Biased Societies
Yasaman Haghpanah, Marie desJardins

562: A Decision-Theoretic Characterization of Organizational Influences
Jason Sleight, Ed Durfee

558: Reasoning under Compliance Assumptions in Normative Multiagent Systems
Max Knobbout, Mehdi Dastani

4C Argumentation & Negotiation (Chair: Catholijn Jonker) 1G 0.5

72: Quantifying Disagreement in Argument-based Reasoning
Richard Booth, Martin Caminada, Mikolaj Podlaszewski, Iyad Rahwan

650: Cooperative Dialogues with Conditional Arguments
Samy Sá, João Alcântara

413: Defeasible Argumentation for Multi-Agent Planning in Ambient Intelligence Applications
Sergio Pajares Ferrando, Eva Onaindía

547: Personalizing Communication about Trust
Andrew Koster, Jordi Sabater-Mir, Marco Schorlemmer

379: From axiomatic to strategic models of bargaining with logical beliefs and goals
Bao Vo, Minyi Li

4D Economies and Markets (Chair: Enrico Gerding) 1G 0.6

338: Optimal Incentive Timing Strategies for Product Marketing on Social Networks
Pankaj Dayama, Aditya Karnik, Yadati Narahari

668: Predicting Your Own Effort
David F. Bacon, Yiling Chen, Ian Kash, David Parkes, Malvika Rao, Manu Sridharan

191: Identifying Influential Agents for Advertising in Multi-agent Markets
Mahsa Maghami, Gita Sukthankar

599: Optimizing Kidney Exchange with Transplant Chains: Theory and Reality
John Dickerson, Ariel Procaccia, Tuomas Sandholm

301: Fair Allocation Without Trade
Avital Gutman, Noam Nisan

4E Game Theory IV (Chair: Christopher Kiekintveld) 1G 1.4

113: Task Routing for Prediction Tasks
Haoqi Zhang, Eric Horvitz, Yiling Chen, David Parkes

297: Mastering multi-player games
Yossi Azar, Uriel Feige, Michal Feldman, Moshe Tennenholtz

606: Game-theoretic Resource Allocation for Malicious Packet Detection in Computer Networks
Ondřej Vaněk, Zhengyu Yin, Manish Jain, Branislav Bošanský, Milind Tambe, Michal Pěchouček

358: Sustaining Cooperation on Networks: An Analytical Study based on Evolutionary Game Theory
Raghunandan Ananthasayanam, Subramanian Chandrasekarapuram

687: Behavioral Game Theoretic Models: A Bayesian Framework For Parameter Analysis
James Wright, Kevin Leyton-Brown

4F Logics for Agency (Chair: Wamberto Vasconcelos) 1G 1.7

14: Action models for knowledge and awareness
Hans van Ditmarsch, Tim French, Fernando R. Velázquez-Quesada

61: Epistemic Coalition Logic: Completeness and Complexity
Thomas Ågotnes, Natasha Alechina

162: Group Synthesis for Parametric Temporal-Epistemic Logic
Andrew Jones, Michal Knapik, Alessio Lomuscio, Wojciech Penczek

258: A Logic of Revelation and Concealment
Wiebe van der Hoek, Petar Iliev, Michael Wooldridge

427: State and Path Coalition Effectivity Models for Logics of Multi-Player Games
Valentin Goranko, Wojciech Jamroga

16:00-17:00 **Coffee Break + Poster + Demos**

Poster Session 4

Extended abstracts:
37, 58, 63, 66, 78, 82, 131, 169, 184, 185, 197, 211, 217, 223, 224, 234, 255, 267, 271, 321, 329, 356, 374, 375, 408, 409, 441, 459, 510, 523, 525, 539, 542, 543, 569, 594, 644, 708, 774, 790

Full papers:
14, 61, 72, 113, 123, 162, 191, 258, 297, 301, 323, 338, 358, 379, 413, 426, 427, 434, 488, 547, 558, 562, 599, 606, 614, 650, 656, 668, 687, 717

Demo Session 2 (afternoon)
Demos: 15,16,17,18,19,20,21,22,23,24,25,26,27,28

17:00-18:00 **Victor Lesser Distinguished Dissertation Award Talk** Paranimf

"Social Norms for Self-Policing Multi-agent Systems and Virtual Societies"
Dr. Daniel Villatoro

FRIDAY, JUNE 8TH

9:00-10:00 **IFAAMAS Influential Paper Award** Paranimf

"A market-oriented programming enviornment and its application to distributed multicommodity flow problems"
Prof. Michael Wellman

"Towards Flexible Teamwork"
Prof. Milind Tambe

10:30-11:50 **Session 5**

5A Robotics III (Chair: Maria Gini) 1G 0.1

742: Active Visual Sensing and Collaboration on Mobile Robots using Hierarchical POMDPs
Shiqi Zhang, Mohan Sridharan

486: What am I doing? Automatic Construction of an Agent's State-Transition Diagram through Introspection
Constantin Berzan, Matthias Scheutz

638: Learning from Demonstration with Swarm Hierarchies
Keith Sullivan, Sean Luke

738: Autonomous Robot Dancing Driven by Beats and Emotions of Music
Guangyu Xia, Junyun Tay, Roger Dannenberg, Manuela Veloso

5B Teamwork (Chair: Matthew Taylor) 1G 0.4

159: Leading Ad Hoc Agents in Joint Action Settings with Multiple Teammates
Noa Agmon, Peter Stone

397: Comparative Evaluation of MAL Algorithms in a Diverse Set of Ad Hoc Team Problems
Stefano Albrecht, Subramanian Ramamoorthy

499: An Analysis Framework for Ad Hoc Teamwork Tasks
Samuel Barrett, Peter Stone

761: Modeling and Learning Synergy for Team Formation with Heterogeneous Agents
Somchaya Liemhetcharat, Manuela Veloso

5C Emergence (Chair: Michael Winikoff) 1G 0.5

62: Crowd IQ - Aggregating Opinions to Boost Performance
Yoram Bachrach, Thore Graepel, Gjergji Kasneci, Michal Kosinski, Jurgen Van-Gael

90: Efficient Opinion Sharing in Large Decentralised Teams
Oleksandr Pryymak, Alex Rogers, Nick Jennings

484: Agents of Influence in Social Networks
Amer Ghanem, Srinivasa Vedanarayanan, Ali Minai

504: The Emergence of Commitments and Cooperation
The Anh Han , Luís Moniz Pereira , Francisco C. Santos

5D Auction & mechanism design (Chair: Alex Rogers) 1G 0.6

590: Mixed-bundling auctions with reserve prices
Pingzhong Tang, Tuomas Sandholm

618: Eliciting Forecasts from Self-interested Experts: Scoring Rules for Decision Makers
Craig Boutilier

641: Worst-Case Optimal Redistribution of VCG Payments in Heterogeneous-Item Auctions with Unit Demand
Mingyu Guo

803: False-name-proofness in Online Mechanisms
Taiki Todo, Takayuki Mouri, Atsushi Iwasaki, Makoto Yokoo

5E Game & agent theories (Chair: Ariel Procaccia) 1G 1.4

722: Scaling Simulation-Based Game Analysis through Deviation-Preserving Reduction
Bryce Wiedenbeck, Michael Wellman

494: Towards Tractable Boolean Games
Paul Dunne, Michael Wooldridge

554: Repeated zero-sum games with budget
Troels Sørensen

238: Detection of Suspicious Behavior from a Sparse Set of Multiagent Interactions
Boštjan Kaluža, Gal Kaminka, Milind Tambe

5F Logic and verification (Chair: Thomas Âgotnes) 1G 1.7

204: A logic of emotions: from appraisal to coping
Mehdi Dastani, Emiliano Lorini

278: Automatic Verification of Epistemic Specifications under Convergent Equational Theories
Ioana Boureanu, Andrew Jones, Alessio Lomuscio

181: Semantics and Verification of Information-Based Protocols
Munindar Singh

11:50-12:00 **Short Break**

12:00-13:00 **Community Session** Paranimf

13:00-13:20 **Closing / AAMAS 2013 Presentation** Paranimf

For the benefit of attendees who are unable to use the USB memory stick at AAMAS, the proceedings are also (temporarily) available at:

http://www.aamas-conference.org/Proceedings/aamas2012/

To access these proceedings use the username "aamas2012" and the password "valencia" (all lower case)

POSTER / DEMO SESSIONS

WEDNESDAY, JUNE 6TH

POSTER SESSION 1

Extended Abstracts:

71: Break with agents who listen to too many others (at least when making Boolean decisions!)
Daniel Epstein, Ana Bazzan, André Machado / PANEL: 101

84: Lottery-based Resource Allocation for Plug-in Electric Vehicle Charging [IA]
Matteo Vasirani, Sascha Ossowski / PANEL: 115

99: The Spanish Steps flower scam - agent-based modeling of a complex social interaction
Ladislau Bölöni / PANEL: 041

103: Adversarial Patrolling Games
Yevgeniy Vorobeychik, Bo An, Milind Tambe / PANEL: 005

126: Can I trust you? Sharing information with artificial companions
Matthias Keysermann, Ruth Aylett, Sibylle Enz, Henriette Cramer, Carsten Zoll, Patricia Vargas / PANEL:095

143: Influence and aggregation of preferences over combinatorial domains
Nicolas Maudet, Maria Silvia Pini, Francesca Rossi, Kristen Brent Venable / PANEL: 021

189: Configurable Human-Robot Interaction for Multi-Robot Manipulation Tasks
Bennie Lewis, Gita Sukthankar / PANEL: 131

194: Manipulation with Randomized Tie-Breaking under Maximin
Michael Zuckerman, Jeffrey Rosenschein / PANEL: 023

207: Partial Cooperation in Multi-agent Search
Roie Zivan, Alon Grubshtein, Michal Friedman, Amnon Meisels / PANEL: 023

214: OrgMAP: An Organization-based Approach for Multi-Agent Programming
Cuiyun Hu, Xinjun Mao, Yin Chen, Huiping Zhou / PANEL: 129

232: Cooperative Virtual Power Plant Formation Using Scoring Rules [IA]
Valentin Robu, Ramachandra Kota, Georgios Chalkiadakis, Alex Rogers, Nick Jennings / PANEL: 119

243: The "Resource" Approach to Emotion
Sabrina Campano, Nicolas Sabouret, Etienne de Sevin, Vincent Corruble / PANEL: 145

322: Goal-Driven Approach To Open-Ended Dialogue Management using BDI Agents
Wilson Wong, Lawrence Cavedon, John Thangarajah, Lin Padgham / PANEL: 147

382: Do Experts Help in Two-Sided Search?
Yinon Nahum, David Sarne, Sanmay Das, Onn Shehory / PANEL: 011

425: Disagreement for control of rational cheating in peer review: a simulation
Mario Paolucci, Francisco Grimaldo / PANEL: 097

430: Global Optimization for Multiple Agents
Brammert Ottens, Boi Faltings / PANEL: 053

449: On Deconflicting Local Coordination Among Agents
Manh Tung Pham, Kiam Tian Seow / PANEL: 081

455: Agent Communication for Believable Human-Like Interactions between Virtual Characters
Joost van Oijen, Frank Dignum / PANEL: 149

456: The Role of Social Identity, Rationality and Anticipation in Believable Agents
Rui Prada, Guilherme Raimundo, Márcia Baptista, Joana Dimas, Pedro A. Santos, Carlos Martinho, Jorge Peña, Luís Landeiro Ribeiro / PANEL: 055

473: Distance-based Rules for Weighted Judgment Aggregation
Marija Slavkovik, Wojciech Jamroga / PANEL: 123

498: Distributed Value Functions for the Coordination of Decentralized Decision Makers
Laëtitia Matignon, Laurent Jeanpierre, Abdel-Illah Mouaddib / PANEL: 133

515: Detecting and Identifying Coalitions
Reid Kerr, Robin Cohen / PANEL: 099

527: Algorithms for Scaling in a General Episodic Memory
Nate Derbinsky, Justin Li, John Laird / PANEL: 105

567: SimAnalyzer: Automated description of groups dynamics in agent-based simulations
Philippe Caillou, Javier Gil-Quijano / PANEL: 045

620: Multi-Robot Learning by Demonstration
Michiel Blokzijl-Zanker, Yiannis Demiris / PANEL: 135

627: Investigating the Role of Social Behavior in Financial Markets through Agent-Based Simulation
Alessia Mauri, Andrea Tettamanzi / PANEL: 015

672: Incentives for Truthful Reporting in Crowdsourcing
Ece Kamar, Eric Horvitz / PANEL: 047

682: Auctioning Robotic Tasks with Overlapping Time Windows
Ernesto Nunes, Maitreyi Nanjanath, Maria Gini / PANEL: 137

709: On the benefits of argumentation schemes in deliberative dialogue
Alice Toniolo, Timothy Norman, Katia Sycara / PANEL: 127

734: Modeling Deep Strategic Reasoning by Humans in Competitive Games
Xia Qu, Prashant Doshi, Adam Goodie / PANEL: 091

776: Opinion Convergence in Agent Networks
Sreerupa Chatterjee, Alexander Ruff, Sandip Sen / PANEL: 049

778: TrustBets: Betting over an IOU Network
Sharad Goel, Mohammad Mahdian, David Pennock, Daniel Reeves / PANEL: 0017

798: Coordinated Look-Ahead Scheduling for Real-Time Traffic Signal Control
Xiao-Feng Xie, Stephen Smith, Gregory J. Barlow / PANEL: 059

817: Automated Equilibrium Analysis of Repeated Games with Private Monitoring: A POMDP Approach
YongJoon Joe, Atsushi Iwasaki, Michihiro Kandori, Ichiro Obara, Makoto Yokoo / PANEL: 019

Full Papers:

13: PROTECT: A Deployed Game Theoretic System to Protect the Ports of the United States [IA]
Eric Shieh, Bo An, Rong Yang, Milind Tambe, Craig Baldwin, Joseph DiRenzo, Ben Maule, Garrett Meyer / PANEL: 139

16: Existence of Stability in Hedonic Coalition Formation Games
Haris Aziz, Florian Brandl / PANEL: 001

24: Coordination Guided Reinforcement Learning
Qiangfeng Peter Lau, Mong Li Lee, Wynne Hsu / PANEL: 061

65: Stablity Scores: Measuring Coalitional Stability
Michal Feldman, Reshef Meir, Moshe Tennenholtz / PANEL: 003

118: SAVES: A Sustainable Multiagent Application to Conserve Building Energy Considering Occupants [IA]
Jun-young Kwak, Pradeep Varakantham, Rajiv Maheswaran, Milind Tambe, Farrokh Jazizadeh, Geoffrey Kavulya, Laura Klein, Burcin Becerik-Gerber, Timothy Hayes, Wendy Wood / PANEL: 117

120: Coalitional Stability in Structured Environments
Georgios Chalkiadakis, Vangelis Markakis, Nick Jennings / PANEL: 007

127: Just Add Pepper: Extending Learning Algorithms for Repeated Matrix Games to Repeated Markov Games
Jacob Crandall / PANEL: 103

159: Leading Ad Hoc Agents in Joint Action Settings with Multiple Teammates
Noa Agmon, Peter Stone / PANEL:

193: V-MAX: Tempered Optimism for Better PAC Reinforcement Learning
Karun Rao, Shimon Whiteson / PANEL: 109

245: Reinforcement Learning Transfer via Sparse Coding
Haitham Bou Ammar, Karl Tuyls, Matthew Taylor, Kurt Driessen, Gerhard Weiss / PANEL: 111

252: Possible and Necessary Winners of Partial Tournaments
Haris Aziz, Markus Brill, Felix Fischer, Paul Harrenstein, Jérôme Lang, Hans Georg Seedig / PANEL: 009

280: Learning in a Small World
Arun Tejasvi Chaganty, Prateek Gaur, Balaraman Ravindran / PANEL: 113

300: Probabilistic Planning with Non-Linear Utility Functions and Worst-Case Guarantees
Stefano Ermon, Carla Gomes, Bart Selman, Alexander Vladimirsky / PANEL: 083

336: Heuristic Search of Multiagent Influence Space
Stefan Witwicki, Frans Oliehoek, Leslie Kaelbling / PANEL: 085

347: Active Malware Analysis using Stochastic Games [IA]
Simon Williamson, Pradeep Varakantham, Debin Gao, Ong Chen Hui / PANEL: 141

381: Overlapping Coalition Formation Games: Charting the Tractability Frontier
Yair Zick, Georgios Chalkiadakis, Edith Elkind / PANEL: 065

384: Agents vs. Pirates: Multi-agent Simulation and Optimization to Fight Maritime Piracy [IA]
Michal Jakob, Ondřej Vaněk, Ondřej Hrstka, Michal Pěchouček / PANEL: 143

397: Comparative Evaluation of MAL Algorithms in a Diverse Set of Ad Hoc Team Problems
Stefano Albrecht, Subramanian Ramamoorthy / PANEL: 067

446: On Coalition Formation with Sparse Synergies
Thomas Voice, Sarvapali Ramchurn, Nick Jennings / PANEL: 069

499: An Analysis Framework for Ad Hoc Teamwork Tasks
Samuel Barrett, Peter Stone / PANEL: 071

561: Campaigns for Lazy Voters: Truncated Ballots
Dorothea Baumeister, Piotr Faliszewski, Jérôme Lang, Jörg Rothe / PANEL: 025

564: Decentralised Channel Allocation and Information Sharing for Teams of Cooperative Agents
Sebastian Stein, Simon Williamson, Nick Jennings / PANEL: 057

570: Strong Mitigation: Nesting Search for Good Policies Within Search for Good Reward
Jeshua Bratman, Satinder Singh, Richard Lewis, Jonathan Sorg / PANEL: 107

590: Mixed-bundling auctions with reserve prices
Pingzhong Tang, Tuomas Sandholm / PANEL: 013

604: Strategyproof Approximations of Distance Rationalizable Voting Rules
Travis Service, Julie Adams / PANEL: 027

608: Communication Complexity of Approximating Voting Rules
Travis Service, Julie Adams / PANEL: 029

618: Eliciting Forecasts from Self-interested Experts: Scoring Rules for Decision Makers
Craig Boutilier / PANEL: 125

655: A Hierarchical Goal-Based Formalism and Algorithm for Single-Agent Planning
Vikas Shivashankar, Ugur Kuter, Dana Nau, Ron Alford / PANEL: 087

663: DiscoverHistory: Understanding the Past in Planning and Execution
Matthew Molineaux, Ugur Kuter, Matthew Klenk / PANEL: 089

711: A New Approach to Betweenness Centrality Based on the Shapley Value
Piotr Szczepański, Tomasz Michalak, Talal Rahwan / PANEL: 073

718: Improving Building Energy Efficiency with a Network of Sensing, Learning and Prediction Agents [IA]
Sunil Mamidi, Yu-Han Chang, Rajiv Maheswaran / PANEL: 121

744: Maintaining Team Coherence under the Velocity Obstacle Framework
Andrew Kimmel, Andrew Dobson, Kostas Bekris / PANEL: 075

761: Modeling and Learning Synergy for Team Formation with Heterogeneous Agents
Somchaya Liemhetcharat, Manuela Veloso / PANEL: 077

812: Time Bounded Adaptive A*
Carlos Hernández, Jorge Baier, Tansel Uras, Sven Koenig / PANEL: 093

822: Handling Negative Value Rules in MC-net-based Coalition Structure Generation
Suguru Ueda, Takato Hasegawa, Naoyuki Hashimoto, Naoki Ohta, Atsushi Iwasaki, Makoto Yokoo / PANEL: 079

POSTER SESSION 2

Extended Abstracts:

26: Cloning, Resource Exchange and Relation Adaptation: A Self-organising Multi-Agent Framework
Dayong Ye, Minjie Zhang, Danny Sutanto / PANEL: 142

35: Individual-based Stability in Hedonic Games depending on the Best or Worst Players
Haris Aziz, Paul Harrenstein, Evangelia Pyrga / PANEL: 022

39: Bribery in Voting Over Combinatorial Domains is Easy
Nicholas Mattei, Maria Silvia Pini, Francesca Rossi, Kristen Brent Venable / PANEL: 114

45: Strategic voting and the logic of knowledge
Hans van Ditmarsch, Jérôme Lang, Abdallah Saffidine / PANEL: 084

67: Revenue prediction in budget-constrained sequential auctions with complementarities
Sicco Verwer, Yingqian Zhang / PANEL: 102

100: On the Social Welfare of Mechanisms for Repeated Batch Matching
Elliot Anshelevich, Meenal Chhabra, Sanmay Das, Matthew Gerrior / PANEL: 002

107: Agent Deliberation via Forward and Backward chaining in Linear Logic
Luke Trodd, James Harland, John Thangarajah / PANEL: 122

144: Selecting judgment aggregation rules for NAO robots: an experimental approach
Vijayalakshmi Ganesan, Marija Slavkovik, Sergio Sousa, Leendert van der Torre / PANEL: 116

147: Bounded Model Checking for Knowledge and Linear Time
Artur Męski, Wojciech Penczek, Bozena Woźna-Szcześniak, Maciej Szreter, Andrzej Zbrzezny / PANEL: 124

178: Online Planning for Large MDPs with MAXQ Decomposition
Aijun Bai, Feng Wu, Xiaoping Chen / PANEL: 132

229: A Storage Pricing Mechanism for Learning Agents in the Masdar City Smart Grid [IA]
Fatimah Ishowo-Oloko, Perukrishnen Vytelingum, Nick Jennings, Iyad Rahwan / PANEL: 140

265: Real-World Testing of a Multi-Robot Team
Paul Scerri, Prasanna Velagapudi, Balajee Kannan, Abhinav Valada, Christopher Tomaszewski, John Dolan, Adrian Scerri, Kumar Shaurya Shankar, Luis Bill-Clark, George Kantor / PANEL: 134

266: Complexity and Approximability of Social Welfare Optimization in Multiagent Resource Allocation
Nhan-Tam Nguyen, Trung Thanh Nguyen, Magnus Roos, Jörg Rothe / PANEL: 006

284: MO-LOST: Adaptive ant trail untangling in multi-objective multi-colony robot foraging
Zhao Song, Seyed Abbas Sadat, Richard T. Vaughan / PANEL: 072

354: Adaptive Negotiating Agents in Dynamic Games: Outperforming Human Behavior in Diverse Societies
Eunkyung Kim, Luyan Chi, Yu Ning, Yu-Han Chang, Rajiv Maheswaran / PANEL: 024

380: Strategic Pseudonym Change in Agent-Based E-Commerce
José Such, Emilio Serrano, Vicent Botti, Ana García-Fornes / PANEL: 100

402: A Truthful Learning Mechanism for Multi-Slot Sponsored Search Auctions with Externalities
Nicola Gatti, Alessandro Lazaric, Francesco Trovò / PANEL: 008

404: Consensus Games
Julian Zappala, Natasha Alechina, Brian Logan / PANEL: 028

433: Merging Multiple Information Sources in Federated Sponsored Search Auctions
Sofia Ceppi, Enrico Gerding, Nicola Gatti / PANEL: 010

462: An Agent-Based Model for Pedestrian and Group Dynamics: Experimental and Real-World Scenarios
Giuseppe Vizzari, Lorenza Manenti / PANEL: 112

479: Decentralized Multi-agent Plan Repair in Dynamic Environments
Antonín Komenda, Peter Novák, Michal Pěchouček / PANEL: 092

517: Using the Max-Sum Algorithm for Supply Chain Formation in Dynamic Multi-Unit Environments
Michael Winsper, Maria Chli / PANEL: 012

529: Testing the Benefits of Structured Argumentation in Multi-Agent Deliberation Dialogues
Eric Kok, John-Jules Meyer, Henry Prakken, Gerard Vreeswijk / PANEL: 118

553: Specifying and reasoning about normative systems in deontic logic programming
Ricardo Gonçalves, José Alferes / PANEL: 120

557: Anytime Algorithms for Multi-agent Visibility-based Pursuit-evasion Games
Viliam Lisý, Branislav Bošanský, Michal Pěchouček / PANEL: 052

563: Scalable decentralized supply chain formation through binarized belief propagation
Toni Penya-Alba, Jesus Cerquides, Juan Antonio Rodriguez-Aguilar, Meritxell Vinyals / PANEL: 080

585: Token Economy for Online Exchange Systems
Jie Xu, William Zame, Mihaela van der Schaar / PANEL: 082

634: Computing Optimal Security Strategies in Networked Domains: A Cost-Benefit Approach
Joshua Letchford, Yevgeniy Vorobeychik / PANEL: 032

667: Learning Performance of Prediction Markets with Kelly Bettors
Alina Beygelzimer, John Langford, David Pennock / PANEL: 016

679: Generating Strategies for Multi-Agent Pursuit-Evasion Games in Partially Observable Euclidean Space
Eric Raboin, Ugur Kuter, Dana Nau / PANEL: 096

685: Spatial awareness in robotic swarms through local wireless communications
Frederick Ducatelle, Gianni Di Caro, Luca Gambardella / PANEL: 136

730: Enabling Robots to Find and Fetch Objects by Querying the Web
Thomas Kollar, Mehdi Samadi, Manuela Veloso / PANEL: 138

783: A Robust Approach to Addressing Human Adversaries in Security Games
James Pita, Richard John, Rajiv Maheswaran, Milind Tambe, Rong Yang, Sarit Kraus / PANEL: 058

826: Designing Better Strategies against Human Adversaries in Network Security Games
Rong Yang, Fei Fang, Albert Xin Jiang, Karthik Rajagopal, Milind Tambe, Rajiv Maheswaran / PANEL: 060

829: Strategy-proof mechanisms for two-sided matching with minimum and maximum quotas
Suguru Ueda, Daniel Fragiadakis, Atsushi Iwasaki, Peter Troyan, Makoto Yokoo / PANEL: 020

Full Papers:

54: Stochastic Dominance in Stochastic DCOPs for Risk Sensitive Applications
Duc Thien Nguyen, William Yeoh, Hoong Chuin Lau / PANEL: 064

75: Lot-based Voting Rules
Toby Walsh, Lirong Xia / PANEL: 042

89: Decentralized Bayesian Reinforcement Learning for Online Agent Collaboration
Luke Teacy, Georgios Chalkiadakis, Alessandro Farinelli, Alex Rogers, Nick Jennings, Sally McClean, Gerard Parr / PANEL: 066

163: Bayesian Model of the Social Effects of Emotion in Decision-Making in Multiagent Systems
Celso de Melo, Peter Carnevale, Stephen Read, Dimitrios Antos, Jonathan Gratch / PANEL: 144

170: Shaping Fitness Functions for Coevolving Cooperative Multiagent Systems
Mitchell Colby, Kagan Tumer / PANEL: 104

176: Towards building a Virtual Counselor: Modeling Nonverbal Behavior during Intimate Self-Disclosure
Sin-Hwa Kang, Jonathan Gratch, Candy Sidner, Ron Artstein, Lixing Huang, Louis-Phillippe Morency / PANEL: 146

183: A Sequential Recommendation Approach for Interactive Personalized Story Generation
Hong Yu, Mark Riedl / PANEL: 108

198: Short Sight in Extensive Games
Davide Grossi, Paolo Turrini / PANEL: 004

200: Max/Min-sum Distributed Constraint Optimization through Value Propagation on an Alternating DAG
Roie Zivan, Hilla Peled / PANEL: 068

215: Dynamic Potential-Based Reward Shaping
Sam Devlin, Daniel Kudenko / PANEL: 106

226: Convergence of Iterative Voting
Omer Lev, Jeffrey Rosenschein / PANEL: 062

238: Detection of Suspicious Behavior from a Sparse Set of Multiagent Interactions
Boštjan Kaluža, Gal Kaminka, Milind Tambe / PANEL: 086

244: Voter Response to Iterated Poll Information
Annemieke Reijngoud, Ulle Endriss / PANEL: 044

277: Improving BnB-ADOPT+-AC
Patricia Gutierrez, Pedro Meseguer / PANEL: 070

318: Evaluating the Models & Behaviour of 3D Intelligent Virtual Animals in a Predator-Prey Relationship
Deborah Richards, Michael J. Jacobson, John Porte, Charlotte Taylor, Meredith Taylor, Anne Newstead, Iwan Kelaiah, Nader Hanna / PANEL: 148

334: Memory Formation, Consolidation, and Forgetting in Learning Agents
Budhitama Subagdja, Wenwen Wang, Ah-Hwee Tan, Yuan-Sin Tan, Loo-Nin Teow / PANEL: 088

343: Learning and Predicting Dynamic Networked Behavior with Graphical Multiagent Models
Quang Duong, Michael Wellman, Satinder Singh, Michael Kearns / PANEL: 126

351: On Supervising Agents in Situation-Determined ConGolog
Giuseppe De Giacomo, Yves Lespérance, Christian Muise / PANEL: 090

378: Model of the Perception of Smiling Virtual Character
Magalie Ochs, Catherine Pelachaud / PANEL: 150

399: New Results on the Verification of Nash Refinements for Extensive-Form Games
Nicola Gatti, Fabio Panozzo / PANEL: 026

416: Manipulation Under Voting Rule Uncertainty
Edith Elkind, Gábor Erdélyi / PANEL: 046

418: Optimal Manipulation of Voting Rules
Svetlana Obraztsova, Edith Elkind / PANEL: 048

428: Optimal Decentralised Dispatch of Embedded Generation in the Smart Grid [IA]
Sam Miller, Sarvapali Ramchurn, Alex Rogers / PANEL: 074

467: DCOPs and Bandits: Exploration and Exploitation in Decentralised Coordination
Ruben Stranders, Long Tran-Thanh, Francesco Maria Delle Fave, Alex Rogers, Nick Jennings / PANEL: 076

481: Playing Repeated Stackelberg Games with Unknown Opponents
Janusz Marecki, Gerry Tesauro, Richard Segal / PANEL: 030

494: Towards Tractable Boolean Games
Paul Dunne, Michael Wooldridge / PANEL: 128

518: Learning and Reasoning about Norms using Neural-Symbolic Systems
Guido Boella, Silvano Colombo Tosatto, Artur d'Avila Garcez, Valerio Genovese, Perotti Alan, Leendert van der Torre / PANEL: 094

545: A Framework for Modeling Population Strategies by Depth of Reasoning
Michael Wunder, Michael Kaisers, John Robert Yaros, Michael Littman / PANEL: 078

554: Repeated zero-sum games with budget
Troels Sørensen / PANEL: 050

630: Improved Use of Partial Policies for Identifying Behavioral Equivalence
Yifeng Zeng, Yinghui Pan, Hua Mao, Jian Luo / PANEL: 130

641: Worst-Case Optimal Redistribution of VCG Payments in Heterogeneous-Item Auctions with Unit Demand
Mingyu Guo / PANEL: 014

722: Scaling Simulation-Based Game Analysis through Deviation-Preserving Reduction
Bryce Wiedenbeck, Michael Wellman / PANEL: 054

726: Efficient Nash Equilibrium Approximation through Monte Carlo Counterfactual Regret Minimization
Michael Johanson, Nolan Bard, Marc Lanctot, Richard Gibson, Michael Bowling / PANEL: 056

731: Generalized and Bounded Policy Iteration for Finitely-Nested Interactive POMDPs: Scaling Up
Ekhlas Sonu, Prashant Doshi / PANEL: 098

803: False-name-proofness in Online Mechanisms
Taiki Todo, Takayuki Mouri, Atsushi Iwasaki, Makoto Yokoo / PANEL: 018

THURSDAY, JUNE 7TH

POSTER SESSION 3

Extended Abstracts:

28: Integrating Self-organisation into Dynamic Coalition Formation
Dayong Ye, Minjie Zhang, Danny Sutanto / PANEL: 041

34: A Programming Approach to Monitoring Communication in an Organisational Environment
Mehdi Dastani, Leendert van der Torre, Neil Yorke-Smith / PANEL: 081

53: Multi-Agent A* for Parallel and Distributed Systems
Raz Nissim, Ronen Brafman / PANEL: 021

68: Towards Student/Teacher Learning in Sequential Decision Tasks
Lisa Torrey, Matthew Taylor / PANEL: 101

152: Multimodal Trust Formation with Uninformed Cognitive Maps (UnCM)
Michele Piunti, Matteo Venanzi, Rino Falcone, Cristiano Castelfranchi / PANEL: 063

154: On the Failure of Game Theoretic Approach for Distributed Deadlock Resolution
Nadav Sofy, David Sarne / PANEL: 125

157: MAS for manufacturing control: A layered case study (IA)
Sindre Pedersen, Bjarne Foss, Ingrid Schjølberg, Johannes Tjønnås / PANEL: 079

166: Combining Independent and Joint Learning: a Negotiation based Approach
Reinaldo Bianchi, Ana Bazzan / PANEL: 109

171: Emotional Contagion with Virtual Characters
Jason Tsai, Emma Bowring, Stacy Marsella, Milind Tambe / PANEL: 051

172: Dynamic change impact analysis for maintaining and evolving agent systems
Hoa Dam, Aditya Ghose / PANEL: 147

188: Adaptive Agents on Evolving Networks
Ardeshir Kianercy, Aram Galstyan, Armen Allahverdyan / PANEL: 103

218: Hierarchical Clustering and Linguistic Mediation Rules for Multiagent Negotiation
Enrique de la Hoz, Miguel Angel Lopez Carmona, Mark Klein, Ivan Marsa-Maestre / PANEL: 043

249: The Dutch eat at 5:30 pm: Shared Strategies for Agent Reasoning
Amineh Ghorbani, Huib Aldewereld, Virginia Dignum, Pablo Noriega / PANEL: 047

259: An Agent-based Annotation Model for Narrative Media
Mario Cataldi, Rossana Damiano, Vincenzo Lombardo, Antonio Pizzo / PANEL: 053

263: Global Constraints in Distributed Constraint Satisfaction
Christian Bessiere, Ismel Brito, Patricia Gutierrez, Pedro Meseguer / PANEL: 027

269: Supporting User-Centric Business Processes with WADE
Federico Bergenti, Giovanni Caire, Danilo Gotta / PANEL: 133

289: The Impact of Social Placement of Non-Learning Agents on Convention Emergence
Nathan Griffiths, Sarabjot Singh Anand / PANEL: 183

309: Planning and Evaluating Multiagent Influences Under Reward Uncertainty
Stefan Witwicki, Inn-Tung Chen, Ed Durfee, Satinder Singh / PANEL: 029

326: SARC: Subjectivity Alignment for Reputation Computation
Hui Fang, Jie Zhang, Murat Şensoy, Nadia Magnenat Thalmann / PANEL: 085

357: Using a hierarchy of coordinators to overcome the frontier effect in social learning
Sherief Abdallah / PANEL: 087

363: An Information Sharing Algorithm For Large Dynamic Mobile Multi-agent Teams
Linglong Zhu, Yang Xu, Paul Scerri, Han Liang / PANEL: 033

405: Sub-delegation and Trust
Chris Burnett, Nir Oren / PANEL: 089

419: Distributed Punishment as a Norm-Signalling Tool
Daniel Villatoro, Giulia Andrighetto, Jordi Brandts, Jordi Sabater-Mir, Rosaria Conte / PANEL: 035

437: MAPLE: Multi-Agent Programming with Letter Exchanges on Sensor Networks
Tiffany Yi-Ting Tsao, Wan-rong Jih, Jane Yung-jen Hsu / PANEL: 141

463: Exclusivity-based Allocation of Knowledge
Madalina Croitoru, Sebastian Rudolph / PANEL: 069

522: Planning in the Logics of Communication and Change
Pere Pardo, Mehrnoosh Sadrzadeh / PANEL: 071

556: Normative Systems require Hybrid Knowledge Bases
Marco Alberti, Ana Sofia Gomes, Ricardo Gonçalves, Matthias Knorr, João Leite, Martin Slota / PANEL: 049

568: Tree-based Pruning for Multiagent POMDPs with Delayed Communication
Frans Oliehoek, Matthijs Spaan / PANEL: 073

575: Emergence of Cooperation through Structural Changes and Incentives in Service-Oriented MAS
Elena del Val, Miguel Rebollo, Vicent Botti / PANEL: 091

587: Handling Change in Normative Specifications
Duangtida Athakravi, Domenico Corapi, Alessandra Russo, Marina De Vos, Julian Padget, Ken Satoh / PANEL: 093

632: Self-management of Ambient Intelligence Systems: a Pure Agent-based Approach
Inmaculada Ayala, Mercedes Amor, Lidia Fuentes / PANEL: 057

642: Behavior Modeling From Learning Agents: Sensitivity to Objective Function Details
Robert Junges, Franziska Klügl / PANEL: 123

757: Bayes-Optimal Reinforcement Learning for Discrete Uncertainty Domains
Emma Brunskill / PANEL: 105

772: Analysis of Methods for solving MDPs
Marek Grześ, Jesse Hoey / PANEL: 077

789: An Analysis of Constructive Network Formation Models
Gary Fredericks, José Vidal / PANEL: 045

Full Papers:

12: Computing Optimal Strategy against Quantal Response in Security Games
Rong Yang, Fernando Ordóñez, Milind Tambe / PANEL: 001

32: Comma: A Commitment-Based Business Modeling Methodology and its Empirical Evaluation
Pankaj Telang, Munindar Singh / PANEL: 145

62: Crowd IQ - Aggregating Opinions to Boost Performance
Yoram Bachrach, Thore Graepel, Gjergji Kasneci, Michal Kosinski, Jurgen Van-Gael / PANEL: 023

70: A Cultural Sensitive Agent for Human-Computer Negotiation
Galit Haim, Ya'akov (Kobi) Gal, Sarit Kraus, Michele Gelfand / PANEL: 061

73: A Unified Method for Handling Discrete and Continuous Uncertainty in Bayesian *Stackelberg Games*
Zhengyu Yin, Milind Tambe / PANEL: 003

90: Efficient Opinion Sharing in Large Decentralised Teams
Oleksandr Pryymak, Alex Rogers, Nick Jennings / PANEL: 131

121: Supervised Morphogenesis - Morphology Control of Ground-based Self-Assembling Robots by Aerial Robots
Nithin Mathews, Alessandro Stranieri, Alexander Scheidler, Marco Dorigo / PANEL: 113

161: Rational Market Making with Probabilistic Knowledge
Abraham Othman, Tuomas Sandholm / PANEL: 005

181: Semantics and Verification of Information-Based Protocols
Munindar Singh / PANEL: 097

204: A logic of emotions: from appraisal to coping
Mehdi Dastani, Emiliano Lorini / PANEL: 065

206: Decentralized Active Robotic Exploration and Mapping for Probabilistic Field Classification in Environmental Sensing
Kian Hsiang Low, Jie Chen, John Dolan, Steve Chien, David Thompson / PANEL: 115

222: Revising Conflicting Intention Sets in BDI Agents
Steven Shapiro, Sebastian Sardina, John Thangarajah, Lawrence Cavedon, Lin Padgham / PANEL: 127

233: Giving Advice to People in Path Selection Problems
Amos Azaria, Zinovi Rabinovich, Sarit Kraus, Claudia Goldman, Omer Tsimhoni / PANEL: 025

251: Can a Zero-Intelligence Plus Model Explain the Stylized Facts of Financial Time Series Data?
Imon Palit, Steve Phelps, Wing Lon Ng / PANEL: 007

278: Automatic Verification of Epistemic Specifications under Convergent Equational Theories
Ioana Boureanu, Andrew Jones, Alessio Lomuscio / PANEL: 129

328: Automatic Task Decomposition and State Abstraction from Demonstration
Luis C. Cobo, Charles L. Isbell Jr., Andrea Thomaz / PANEL: 031

348: Measuring Plan Coverage and Overlap for Agent Reasoning
John Thangarajah, Sebastian Sardina, Lin Padgham / PANEL: 067

392: Robot Exploration with Fast Frontier Detection: Theory and Experiments
Matan Keidar, Gal Kaminka / PANEL: 117

406: Programming Norm-Aware Agents
Natasha Alechina, Mehdi Dastani, Brian Logan / PANEL: 139

465: Metamodel-Based Metrics for Agent-Oriented Methodologies
Noélie Bonjean, Antonio Chella, Massimo Cossentino, Marie-Pierre Gleizes, Frédéric Migeon, Valeria Seidita / PANEL: 149

484: Agents of Influence in Social Networks
Amer Ghanem, Srinivasa Vedanarayanan, Ali Minai / PANEL: 099

486: What am I doing? Automatic Construction of an Agent's State-Transition Diagram through Introspection
Constantin Berzan, Matthias Scheutz / PANEL: 055

504: The Emergence of Commitments and Cooperation
The Anh Han , Luís Moniz Pereira , Francisco C. Santos / PANEL: 037

535: A Scoring Rule-based Mechanism for Aggregate Demand Prediction in the Smart Grid
Harry Rose, Alex Rogers, Enrico Gerding / PANEL: 009

559: A Model-Based Online Mechanism with Pre-Commitment and its Application to Electric Vehicle Charging
Sebastian Stein, Enrico Gerding, Valentin Robu, Nick Jennings / PANEL: 011

638: Learning from Demonstration with Swarm Hierarchies
Keith Sullivan, Sean Luke / PANEL: 111

654: Multi-Objective Optimization for Security Games
Matthew Brown, Bo An, Christopher Kiekintveld, Fernando Ordóñez, Milind Tambe / PANEL: 013

695: Combining Human and Machine Intelligence in Large-scale Crowdsourcing
Ece Kamar, Severin Hacker, Eric Horvitz / PANEL: 143

707: Dynamic Reconfiguration in Modular Robots using Graph Partitioning-based Coalitions
Prithviraj Dasgupta, Vladimir Ufimtsev, Carl Nelson, S. G. M. Hossain / PANEL: 119

733: Reinforcement Learning from Simultaneous Human and MDP Reward
W. Bradley Knox, Peter Stone / PANEL: 063

737: Strategy Purification and Thresholding: Effective Non-Equilibrium Approaches for Playing Large Games
Sam Ganzfried, Tuomas Sandholm, Kevin Waugh / PANEL: 015

738: Autonomous Robot Dancing Driven by Beats and Emotions of Music
Guangyu Xia, Junyun Tay, Roger Dannenberg, Manuela Veloso / PANEL: 075

742: Active Visual Sensing and Collaboration on Mobile Robots using Hierarchical POMDPs
Shiqi Zhang, Mohan Sridharan / PANEL: 121

758: Solving Non-Zero Sum Multiagent Network Flow Security Games with Attack Costs
Steven Okamoto, Noam Hazon, Katia Sycara / PANEL: 095

797: Efficient Crowdsourcing Contests
Ruggiero Cavallo, Shaili Jain / PANEL: 017

806: UT Austin Villa 2011: A Champion Agent in the RoboCup 3D Soccer Simulation Competition
Patrick MacAlpine, Daniel Urieli, Samuel Barrett, Shivaram Kalyanakrishnan, Francisco Barrera, Adrian Lopez-Mobilia, Nicolae Ştiurcă, Victor Vu, Peter Stone / PANEL: 107

POSTER SESSION 4

Extended Abstracts:

37: Collaborative Job Processing on a Single Machine - A Multi-Agent Weighted Tardiness Problem
Fabian Lang, Andreas Fink / PANEL: 042

58: Agent-based simulation of mobility in real-world transportation networks
Maicon Amarante, Ana Bazzan / PANEL: 122

63: The role of identity in agent design
Ines Di Loreto, Fabien Hervouet / PANEL: 098

66: Coalitional Agency and Evidence-Based Ability
Nicolas Troquard / PANEL: 064

78: Cooperation among Malicious Agents: A General Quantitative Congestion Game Framework
Zaojie Rui, Tuanjie Fu, Darong Lai, Yichuan Jiang / PANEL: 108

82: Intention-Aware Planning under Uncertainty for Interacting with Self-Interested, Boundedly Rational Agents
Trong Nghia Hoang, Kian Hsiang Low / PANEL: 066

131: A Context-aware Normative Structure in MAS
Jie Jiang, Huib Aldewereld, Virginia Dignum, Yao-Hua Tan / PANEL: 082

169: Modeling Difference Rewards for Multiagent Learning
Scott Proper, Kagan Tumer / PANEL: 102

184: A Dempster-Shafer Theory Based Witness Trustworthiness Model
Siyuan Liu, Alex C. Kot, Chunyan Miao, Yin-Leng Theng / PANEL: 084

185: On modeling punishment in multi-agent systems
Subhasis Thakur, Guido Governatori, Abdul Sattar / PANEL: 086

197: A BDI Dialogue Agent for Social Support: Specification of Verbal Support Types
Janneke van der Zwaan, Virginia Dignum, Catholijn Jonker / PANEL: 056

211: Determining the Willingness to Comply With Norms
Natalia Criado, Estefanía Argente, Pablo Noriega, Vicent Botti / PANEL: 046

217: An RL approach to Common-Interest Continuous Action Games
Abdel Rodríguez, Peter Vrancx, Ricardo Grau, Ann Nowé / PANEL: 104

223: Branch and Bound for Negotiations in Large Agreement Spaces
Dave de Jonge, Carles Sierra / PANEL: 048

224: The Benefits of Search Costs in Multiagent Exploration
David Sarne, Yonatan Aumann / PANEL: 004

234: A cognitive architecture for emergency response [IA]
Felipe Meneguzzi, Siddharth Mehrotra, James Tittle, Jean Oh, Nilanjan Chakraborty, Katia Sycara, Michael Lewis / PANEL: 140

255: Opinion Gathering Using a Multi-Agent Systems Approach to Policy Selection [IA]
Adam Wyner, Katie Atkinson, Trevor Bench-Capon / PANEL: 136

267: Efficient Context Free Parsing of Multi-agent Activities for Team and Plan Recognition
Bikramjit Banerjee, Jeremy Lyle, Landon Kraemer / PANEL: 126

271: Emergent Behaviour of Bacteria in a Multiagent System
Philip Hendrix, Elena Budrene, Benoit Morel, Igor Linkov / PANEL: 110

321: An Adaptive System for Proactively Supporting Sustainability Goals [IA]
Sarah Hickmott, Liam Magee, James Thom, Lin Padgham / PANEL: 144

329: Prioritized Shaping of Models for Solving DEC-POMDPs
Pradeep Varakantham, William Yeoh, Prasanna Velagapudi, Katia Sycara, Paul Scerri / PANEL: 024

356: When speed matters in learning against adversarial opponents
Mohamed Elidrisi, Maria Gini / PANEL: 012

374: Evaluating POMDP Rewards for Active Perception
Adam Eck, Leen-Kiat Soh / PANEL: 070

375: Higher-order social cognition in rock-paper-scissors: A simulation study
Harmen de Weerd, Rineke Verbrugge, Bart Verheij / PANEL: 058

408: Delayed Observation Planning in Partially Observable Domains
Pradeep Varakantham, Janusz Marecki / PANEL: 072

409: Agent-human Coordination with Communication Costs under Uncertainty
Asaf Frieder, Raz Lin, Sarit Kraus / PANEL: 028

441: On-the-fly behavior coordination for interactive virtual agents - A model for learning, recognizing and reproducing hand-arm gestures online
Ulf Großekathöfer, Nils-Christian Wöhler, Thomas Hermann, Stefan Kopp / PANEL: 030

459: A Common Gradient in Multi-agent Reinforcement Learning
Michael Kaisers, Daan Bloembergen, Karl Tuyls / PANEL: 106

510: User-Centric Preference-Based Decision Making
Ingrid Nunes, Simon Miles, Michael Luck, Carlos de Lucena / PANEL: 074

523: Multi-dimensional Transition Deliberation for Organization Adaptation in Multiagent Systems
Juan M. Alberola, Vicente Julian, Ana García-Fornes / PANEL: 090

525: Lagrangian Relaxation for Large-Scale Multi-Agent Planning
Geoff Gordon, Pradeep Varakantham, William Yeoh, Hoong Chuin Lau, Ajay Srinivasan Aravamudhan, Shih-Fen Cheng / PANEL: 076

539: Live Generation of Interactive Non-Verbal Behaviours
Ken Prepin, Catherine Pelachaud / PANEL: 032

542: Emergence of Multi-generational Migration Behavior by Adaptiogenesis to Environmental Changes [IA]
Katsuya Suetsugu, Atsuko Mutoh, Shohei Kato, Hidenori Itoh / PANEL: 112

543: The Impact of Cultural Differences on Crowd Dynamics
Natalie Fridman, Avishay Zilka, Gal Kaminka / PANEL: 134

569: Enhancing Decentralized Service Discovery through Structural Self-Organization
Elena del Val, Matteo Vasirani, Miguel Rebollo, Alberto Fernandez / PANEL: 060

594: Patterns of Migration and Adoption of Choices By Agents in Communities
Feyza Hafizoğlu, Sandip Sen / PANEL: 120

644: Knowing Each Other in Argumentation-based Negotiation
Elise Bonzon, Yannis Dimopoulos, Pavlos Moraitis / PANEL: 054

708: Role Selection in Ad Hoc Teamwork
Katie Genter, Noa Agmon, Peter Stone / PANEL: 036

774: Finding new consequences of an observation in a system of agents
Gauvain Bourgne, Katsumi Inoue, Nicolas Maudet / PANEL: 080

790: A Better Maximization Procedure For Online Distributed Constraint Optimization
Yoonheui Kim, Victor Lesser / PANEL: 038

Full Papers:

14: Action models for knowledge and awareness
Hans van Ditmarsch, Tim French, Fernando R. Velázquez-Quesada / PANEL: 040

61: Epistemic Coalition Logic: Completeness and Complexity
Thomas Ågotnes, Natasha Alechina / PANEL: 062

72: Quantifying Disagreement in Argument-based Reasoning
Richard Booth, Martin Caminada, Mikolaj Mikołaj, Iyad Rahwan / PANEL: 044

113: Task Routing for Prediction Tasks
Haoqi Zhang, Eric Horvitz, Yiling Chen, David Parkes / PANEL: 002

123: Property-driven design for swarm robotics
Manuele Brambilla, Carlo Pinciroli, Mauro Birattari, Marco Dorigo / PANEL: 114

162: Group Synthesis for Parametric Temporal-Epistemic Logic
Andrew Jones, Michał Knapik, Alessio Lomuscio, Wojciech Penczek / PANEL: 124

191: Identifying Influential Agents for Advertising in Multi-agent Markets
Mahsa Maghami, Gita Sukthankar / PANEL: 132

258: A Logic of Revelation and Concealment
Wiebe van der Hoek, Petar Iliev, Michael Wooldridge / PANEL: 068

297: Mastering multi-player games
Yossi Azar, Uriel Feige, Michal Feldman, Moshe Tennenholtz / PANEL: 006

301: Fair Allocation Without Trade
Avital Gutman, Noam Nisan / PANEL: 008

323: A Multiagent Evolutionary Framework based on Trust for Multiobjective Optimization
Siwei Jiang, Jie Zhang, Yew-Soon Ong / PANEL: 022

338: Optimal Incentive Timing Strategies for Product Marketing on Social Networks
Pankaj Dayama, Aditya Karnik, Yadati Narahari / PANEL: 010

358: Sustaining Cooperation on Networks: An Analytical Study based on Evolutionary Game Theory
Raghunandan Ananthasayanam, Subramanian Chandrasekarapuram / PANEL: 026

379: From axiomatic to strategic models of bargaining with logical beliefs and goals
Bao Vo, Minyi Li / PANEL: 050

413: Defeasible Argumentation for Multi-Agent Planning in Ambient Intelligence Applications
Sergio Pajares Ferrando, Eva Onaindia / PANEL: 052

426: Multi-robot collision avoidance with localization uncertainty
Daniel Hennes, Daniel Claes, Wim Meeussen, Karl Tuyls / PANEL: 116

427: State and Path Coalition Effectivity Models for Logics of Multi-Player Games
Valentin Goranko, Wojciech Jamroga / PANEL: 128

434: Decision-Theoretic Approach to Maximizing Observation of Multiple Targets in Multi-Camera Surveillance [IA]
Prabhu Natarajan, Trong Nghia Hoang, Kian Hsiang Low, Mohan Kankanhalli / PANEL: 138

488: A qualitative reputation system for multiagent systems with protocol-based communication
Emilio Serrano, Michael Rovatsos, Juan Botia / PANEL: 088

547: Personalizing Communication about Trust
Andrew Koster, Jordi Sabater-Mir, Marco Schorlemmer / PANEL: 092

558: Reasoning under Compliance Assumptions in Normative Multiagent Systems
Max Knobbout, Mehdi Dastani / PANEL: 078

562: A Decision-Theoretic Characterization of Organizational Influences
Jason Sleight, Ed Durfee / PANEL: 094

599: Optimizing Kidney Exchange with Transplant Chains: Theory and Reality
John Dickerson, Ariel Procaccia, Tuomas Sandholm / PANEL: 014

606: Game-theoretic Resource Allocation for Malicious Packet Detection in Computer Networks
Ondřej Vaněk, Zhengyu Yin, Manish Jain, Branislav Bošanský, Milind Tambe, Michal Pěchouček / PANEL: 016

614: Segregation in Swarms of e-puck Robots Based On the Brazil Nut Effect
Jianing Chen, Melvin Gauci, Michael J. Price, Roderich Groß / PANEL: 118

650: Cooperative Dialogues with Conditional Arguments
Samy Sá, João Alcântara / PANEL: 034

656: Model-Driven Behavior Specification for Robotic Teams
Alexandros Paraschos, Nikolaos Spanoudakis, Michail Lagoudakis / PANEL: 142

668: Predicting Your Own Effort
David F. Bacon, Yiling Chen, Ian Kash, David Parkes, Malvika Rao, Manu Sridharan / PANEL: 018

687: Behavioral Game Theoretic Models: A Bayesian Framework For Parameter Analysis
James Wright, Kevin Leyton-Brown / PANEL: 130

717: PRep: A Probabilistic Reputation Model for Biased Societies
Yasaman Haghpanah, Marie des Jardins / PANEL: 096

DEMO SESSION 1

WEDNESDAY, JUNE 6TH

D01: SAFEPED: Agent-Based Environment for Estimating Accident Risks at the Road Black Spot
Gennady Waizman, Itzhak Benenson

D02: Sustainable Multiagent Application to Conserve Energy (Demonstration)
Jun-Young Kwak, Pradeep Varakantham, Rajiv Maheswaran, Milind Tambe, Farrokh Jazizadeh, Geoffrey Kavulya, Laura Klein, Burcin Becerik-Gerber, Timothy Hayes, Wendy Wood

D03: Decentralised stable coalition formation among energy consumers in the smart grid
Filippo Bistaffa, Alessandro Farinelli, Meritxell Vinyals, Alex Rogers

D04: ARGUS: A Coordination System to Provide First Responders with Live Aerial Imagery of the Scene of a Disaster
Francesco Delle Fave, Alex Rogers, Nick Jennings

D05: An Intelligent Agent for Home Heating Management
Alex Rogers, Sasan Maleki, Siddhartha Ghosh, Nick Jennings

D06: A Development Environment for Engineering Intelligent Avatars for Semantically-enhanced Simulated Realities
Stefan Warwas, Matthias Klusch, Klaus Fischer, Philipp Slusallek

D07: Running Experiments on DipGame Testbed
Angela Fabregues, Santiago Biec, Carles Sierra

D08: v-mWater: a 3D Virtual Market for Water Rights (Demonstration)
Pablo Almajano, Tomas Trescak, Marc Esteva, Inmaculada Rodríguez Maite Lopez-Sanchez.

D09: Stigmergic Coverage Algorithm for Multi-Robot Systems
Bijan Ranjbar-Sahraei, Gerhard Weiss, Ali Nakisaee

D10: Infraworld, a Multi-agent based framework to assist in Civil Infrastructure collaborative design
Jaume Dominguez Faus, Francisco Grimaldo Moreno

D11: MITRO: an augmented mobile telepresence robot with assisted control
Sjriek Alers, Daan Bloembergen, Max Bagler, Daniel Hennes, Karl Tuyls

D12: Pogamut Toolkit (Demonstration)
Jakub Gemrot, Cyril Brom, Michal Bída

D13: Migrating Artificial Companions
Iain Wallace, Michael Kriegel, Ruth Aylett

D14: CALU: Collision Avoidance with Localization Uncertainty
Daniel Claes, Daniel Hennes, Karl Tuyls, Wim Meeussen

DEMO SESSION 2

THURSDAY, JUNE 7TH

D15: Effective Methods for Generating Collision Free Paths for Multiple Robots based on Collision Type
Fan Liu, Ajit Narayanan, Quan Bai

D16: Learning to be Scientists via a Virtual Field Trip
Deborah Richards, Michael Jacobson, Meredith Taylor, Anne Newstead, Charlotte Taylor, John Porte, Iwan Kelaiah, Nader Hanna

D17: Virtual Characters in Agent-Augmented Co-Space
Yilin Kang, Ah-Hwee Tan, Budhitama Subagdja, Yew-Soon Ong, Chun-Yan Miao

D18: Tactical Operations of Multi-Robot Teams in Urban Warfare
Peter Novák, Antonín Komenda, Viliam Lisy, Branislav Bosansky, Michal Cap, Michal Pechoucek

D19: GaTAC: A Scalable and Realistic Testbed for Multiagent Decision Making
Ekhlas Sonu, Prashant Doshi

D20: Expectation and Complex Event Handling in BDI-based Intelligent Virtual Agents (Demonstration)
Surangika Ranathunga, Stephen Cranefield

D21: AgentPolis: Towards a Platform for Fully Agent-based Modeling of Multi-Modal Transportation
Michal Jakob, Zbynek Moler, Antonin Komenda, Zhengyu Yin, Albert Xin Jiang, Matthew P Johnson, Michal Pechoucek, Milind Tambe

D22: Toolkit for Teaching Steering Behaviors for 3D Human-like Virtual Agents
Markéta Popelová, Cyril Brom, Jakub Tomek and Michal Bída

D23: Context-Aware MAS to Support Elderly People
Bostjan Kaluza, Mitja Lustrek, Erik Dovgan, Matjaz Gams

D24: Agent Based Monitoring of Gestational Diabetes Mellitus (Demonstration)
René Schumann, Stefano Bromuri, Johannes Krampf and Michael Schumacher

D25: Protos: A Cross-Organizational Business Modeling Tool
Anup Kalia, Pankaj Telang, Munindar Singh

D26: ARGOS: Simulating Migration Processes
Oscar Alejandro Alvarado Prieto, Nancy Ruiz, Adriana Giret, Vicente Julian, Vicent Botti, Victor Perez, Rosa M. Rodriguez

D27: Team-It: Location-Based Mobile Games for Multi-Agent Coordination and Negotiation (Demonstration)
Spencer Frazier, Alex Newnan, Yu-Han Chang, Rajiv Maheswaran

D28: Distributed Consensus for Interaction between Humans and Mobile Robot Swarms (Demonstration)
Alessandro Giusti, Jawad Nagi, Luca M. Gambardella, Gianni A. Di Caro

INVITED TALKS

ALEX ROGERS

(University of Southampton)
http://www.ecs.soton.ac.uk/people/acr

Alex Rogers is a Reader in the Agents, Interaction and Complexity Research Group at the University of Southampton in the UK. Originally graduating with a degree in Physics, he spend five years working as a field engineer in the oil industry before returning to academia having developed an interest in complexity science and multi-agent systems. His research interests address the challenges in developing and applying agent-based algorithms and mechanisms for the control of decentralised systems.

This work has addressed applications in areas such as sensor networks and unmanned autonomous vehicles, and most recently, has focused on applications within future energy systems such as the smart grid.

Delivering the Smart Grid: A Grand Challenge for Autonomous Agents Research

Restructuring electricity grids to meet the increased demand of electric vehicles and heat pumps, while making greater use of intermittent renewable energy sources, represents one of the greatest engineering challenges of our day. This modern electricity grid, in which both electricity and information flow in two directions between large numbers of widely distributed suppliers and generators - commonly termed the 'smart grid' - represents a radical reengineering of infrastructure which has changed little over the last hundred years. However, the autonomous behaviour expected of the smart grid, its highly distributed nature, and the existence of multiple stakeholders each with their own incentives and interests, challenges existing engineering approaches. In this talk, I will describe why I believe that autonomous agents and multi-agent systems are essential for delivering the smart grid as it is envisioned. I will present some recent work that has been done in this area, and describe many challenges that still remain.

COLIN CAMERER

(California Institute of Technology)

http://www.hss.caltech.edu/~camerer/camerer.html

Colin Camerer is the Robert Kirby Professor of Behavioral Economics at Caltech. He earned a Ph.D. from the University of Chicago in 1981 and worked at Northwestern, Penn, and Chicago before Caltech. He has published more than 150 peer-reviewed articles and book chapters and wrote or co-edited four books. Camerer's research group is interested in the psychological and neural basis of choice, strategizing in games, and trading in markets.

Our focus is on complex goal-directed choices which typically involve rewards that depend on random events or choices by others. Recent neuroeconomic fMRI projects involve self-control in choosing tempting foods, weighting probabilities, curiosity, choice overload, and the contrast between hypothetical and binding (real) choices. His group also does economics using field data—testing game theory models of realistic limits on strategic thinking, using Swedish lotteries and movie revenues. Earlier projects examine hot hand misperceptions and sunk cost fallacies in NBA basketball, and labor supply of cab drivers. Our group also does field experiments, studying risk and time preferences, and group favoritism in Vietnam.* Prof. Camerer has been the past president of the Economic Science (experimental economics) Association and the Society for Neuroeconomics, and was elected a Fellow of the Econometric Society and a member of the American Academy of Arts and Sciences.

Lab and field evidence of a cognitive hierarchy in strategic thinking

When software agents interact with people, game theory provides a framework to help the agents make decisions. However, human behavior in games differs from that of the infinitely rational beings studied in classical game theory. Cognitive hierarchy (CH) models offer an algorithmic approach to modelling bounded rationality in strategic thinking, particularly for new strategic environments or as initial conditions for models of learning from experience. CH models have been applied to many experimental data sets, and to some field settings including Swedish lottery games and quality disclosure of movies through critics' reviews. There is also evidence from measuring visual attention, and fMRI of brain activity, which is consistent with steps of strategic thinking.

MOSHE TENNENHOLTZ

(Technion/Microsoft Research Israel)

ACM/SIGART Autonomous Agents research award 2012 winner

http://iew3.technion.ac.il/Home/Users/Moshet.phtml

Moshe Tennenholtz is the Sonheimer Professor at the Technion--Israel Institute of Technology. He is also a Principal Researcher at Microsoft Research and a founder of the basic research group at the Microsoft Israel R&D center. Moshe received his B.Sc. in Mathematics from Tel-Aviv University (1986), and his M.Sc. and Ph.D. (1987, 1991) from the Department of Applied Mathematics and Computer Science in the Weizmann Institute.

Moshe served as the editor-in-chief of the Journal of Artificial Intelligence Research (JAIR); he is also an associate editor of Games and Economic Behavior, the International Journal of Autonomous Agents and Multi-Agent Systems, and of the Transactions on Economics and Computation, serves on the editorial board of the Journal of Machine Learning Research, the moderator for the computer science and game theory section of the arXiv, and served on the editorial board of the AI magazine.

Moshe is a AAAI fellow and a fellow of the society for advancement of economic theory. He served as program chair of the ACM Electronic Commerce (EC) conference, and of the TARK conference. He was also co-founder and chief scientist of companies in the area of e-commerce. In joint work with colleagues and students he introduced several pioneering contributions to the interplay between computer science and game theory, such as the study of artificial social systems, co-learning, non-cooperative computing, distributed games, the axiomatic approach to qualitative decision making, the axiomatic approach to ranking, reputation, and trust systems, competitive safety analysis, program equilibrium, mediated equilibrium, and learning equilibrium, as well as the first near-optimal polynomial algorithm for reinforcement learning in stochastic games.

Social Contexts

This talk will advocate the explicit treatment of social contexts for the design of automated agents and multi-agent systems. In particular, I will illustrate how social contexts effect the design of optimization algorithms, how social contexts can be designed to lead to efficient and stable multi-agent systems, and how adopting assumptions about the nature of the social context can provide powerful solutions to classical challenges in game theory and reinforcement learning.

2011 IFAAMAS Victor Lesser Distinguished Dissertation Award

Daniel Villatoro
(B. Digital)

Daniel Villatoro completed his PhD at the IIIA-CSIC under the supervision of Dr. Jordi Sabater-Mir.

His main research interests focus on self-policing mechanisms for the adaptation of virtual environments, paying special attention to the interaction of virtual entities and human subjects.

He has collaborated with known researchers in the area such as Sandip Sen, Rosaria Conte, Giulia Andrighetto or Michael Luck, and visited important institutions such as the Santa Fe Institute. Daniel has over 20 publications in top tier conferences and specialized journals.

Moreover he has been an active member of the community acting as general chair of the EASSS09 and EASSS11, and the MABS11 Workshop, and reviewer of the most important journals (such as JAAMAS, EAAI, or ACM TAAS) and conferences (such as AAAI, IJCAI, AAMAS or ECAI).

Social Norms for Self-policing Multi-agent Systems and Virtual Societies

ABSTRACT:

Social norms help people self-organizing in many situations where having an authority representative is not feasible. On the contrary to institutional rules, the responsibility to enforce social norms is not the task of a central authority but a task of each member of the society. In recent years, the use of social norms has been considered also as a mechanism to regulate virtual societies and specifically heterogeneous societies formed by humans and artificial agents.

Firstly we sketch a game-theoretical categorization of norms that will organize the rest of the talk. This dissertation generally tackles how norms (assuming their existence) become established inside a virtual society, such as those formed entirely by virtual agents or a combination of them with human subjects.

We initially tackle how conventions emerge when dealing with different topological structures of interactions. In this part we discovered how in social networks (with the theoretical characteristics of a scale-free) conventions cannot always emerge (even in the self-interest of the whole society), because of the emergence of subconventions

that are facilitated by the inherent structure of the network. The identification of the Self-Reinforcing Substructures have allowed us to develop the necessary mechanisms to reach full convergence, which was never previously reached by any other researcher in the community.

After that we explore other mechanisms that allow the imposition of social norms, such as incentives mechanisms like punishment. We present an empirical study of how different punishment technologies affect differently human subjects and we develop an agent architecture (EMIL-I-A) which behaves similarly. This architecture is not only affected by the costs associated to punishment but also by the normative message it conveys, allowing the transmission of normative messages, establishing therefore the differentiation between punishment and sanction. This hypothesis is tested using a cross-methodological approach performing human experimentation and agent based simulation.

Finally, we explore another cognitive mechanism that would allow us to explain the voluntary non self-interested compliance, Internalization, by which agents comply with norms because so doing is an end in itself, and not merely because of external sanctions, such as material rewards or punishment."

2012 IFAAMAS Award for Influential Papers in Autonomous Agents and Multiagent Systems

Michael P. Wellman
(University of Michigan)

Michael P. Wellman is Professor of Computer Science & Engineering at the University of Michigan.

He received a PhD from the Massachusetts Institute of Technology in 1988 for his work in qualitative probabilistic reasoning and decision-theoretic planning. From 1988 to 1992, Wellman conducted research in these areas at the USAF's Wright Laboratory. For the past 19+ years, his research has focused on computational market mechanisms for distributed decision making and electronic commerce.

As Chief Market Technologist for TradingDynamics, Inc. (now part of Ariba), he designed configurable auction technology for dynamic business-to-business commerce. Wellman previously served as Chair of the ACM Special Interest Group on Electronic Commerce (SIGecom), and as Executive Editor of the Journal of Artificial Intelligence Research. He is a Fellow of the Association for the Advancement of Artificial Intelligence and the Association for Computing Machinery.

A market-oriented programming enviornment and its application to distributed multicommodity flow problems

(Journal of Artificial Intelligence Research, Volume 1, pages 1-23, 1993 http://www.jair.org/papers/paper2.html)

ABSTRACT:
Market price systems constitute a well-understood class of mechanisms that under certain conditions provide effective decentralization of decision making with minimal communication overhead. In a market oriented programming approach to distributed problem solving, we derive the activities and resource allocations for a set of computational agents by computing the competitive equilibrium of an artificial economy WALRAS provides basic constructs for defining computational market structures, and protocols for deriving their corresponding price equilibria. In a particular realization of this approach for a form of multicommodity flow problem, we see that careful construction of the decision process according to economic principles can lead to efficient distributed resource allocation, and that the behavior of the system can be meaningfully analyzed in economic terms.

Milind Tambe
(University of Southern California)

Milind Tambe is a Professor of Computer Science and Industrial and Systems Engineering at the University of Southern California(USC).

He leads the TEAMCORE Research Group at USC, with research focused on agent-based and multi-agent systems. He is a fellow of AAAI (Association for Advancement of Artificial Intelligence) and recipient of the ACM (Association for Computing Machinery) "Autonomous Agents Research Award".

He is also the recipient of the Christopher Columbus Fellowship Foundation Homeland security award, the Rist Prize of the Military Operations Research Society, a "most influential paper award" from the International Foundation for Agents and Multiagent Systems, US First Coast Guard District's Operational Excellence Award, Certificate of Appreciation from the US Federal Air Marshals Service, special commendation given by the Los Angeles World Airports police from the city of Los Angeles, USC Viterbi School of Engineering use-inspired research award, Okawa foundation faculty research award, the RoboCup scientific challenge award, USC Steven B. Sample Teaching and Mentoring award and the ACM recognition of service award.

Prof. Tambe and his research group's papers have been selected as best papers at a dozen premier Artificial Intelligence and Operations Research Conferences and workshops; these have included best paper awards at the International Conference on Autonomous Agents and Multiagent Systems and International Conference on Intelligent Virtual Agents.

Additionally, algorithms developed by his Teamcore research group have been deployed for real-world use by several agencies including the LAX police, the Federal Air Marshals service, the US Coast Guard and the Transportation security administration. He received his Ph.D. from the School of Computer Science at Carnegie Mellon University.

Towards Flexible Teamwork

(Journal of Artificial Intelligence Research, Volume 7, pages 83-124, 1997.
http://www.jair.org/papers/paper433.html)

ABSTRACT:

Many AI researchers are today striving to build agent teams for complex, dynamic multi-agent domains, with intended applications in arenas such as education, training, entertainment, information integration, and collective robotics. Unfortunately, uncertainties in these complex, dynamic domains obstruct coherent teamwork. In particular, team members often encounter differing, incomplete, and possibly inconsistent views of their environment. Furthermore, team members can unexpectedly fail in fulfilling responsibilities or discover unexpected opportunities. Highly flexible coordination and communication is key in addressing such uncertainties. Simply fitting individual agents with precomputed coordination plans will not do, for their inflexibility can cause severe failures in teamwork, and their domain-specificity hinders reusability.

Our central hypothesis is that the key to such flexibility and reusability is providing agents with general models of teamwork. Agents exploit such models to autonomously reason about coordination and communication, providing requisite flexibility. Furthermore, the models enable reuse across domains, both saving implementation effort and enforcing consistency.

This article presents one general, implemented model of teamwork, called STEAM. The basic building block of teamwork in STEAM is joint intentions (Cohen & Levesque, 1991b); teamwork in STEAM is based on agents' building up a (partial) hierarchy of joint intentions (this hierarchy is seen to parallel Grosz & Kraus's partial SharedPlans, 1996). Furthermore, in STEAM, team members monitor the team's and individual members' performance, reorganizing the team as necessary. Finally, decision-theoretic communication selectivity in STEAM ensures reduction in communication overheads of teamwork, with appropriate sensitivity to the environmental conditions. This article describes STEAM's application in three different complex domains, and presents detailed empirical results.

AWARDS

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. Previous winners of the SIGART Autonomous Research Award were Joe Halpern (2011), Jonathan Gratch and Stacy Marsella (2010), Manuela Veloso (2009), Yoav Shoham (2008), Sarit Kraus (2007). Michael Wooldridge (2006), Milind Tambe (2005), Makoto Yokoo (2004), Nick Jennings (2003), Katia Sycara (2002), and Tuomas Sandholm (2001).

The 2012 ACM SIGART Autonomous Agents Research Award recipient is Moshe Tennenholtz (Technion/Microsoft Research Israel).

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 2011 award, a dissertation had to have been written as part of a PhD defended during the year 2011, 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 Bo An (2010), Andrew Gilpin (2009), Ariel Procaccia (2008), Radu Jurca (2007), and Vincent Conitzer (2006).

This year eight PhD theses were nominated for the Victor Lesser Distinguished Dissertation Award. All nominees are of outstanding quality and made the choosing of a single winner extremely difficult. After many discussions and even several rounds of voting it was decided that this year (as for the 2010 award) the Victor Lesser Distinguished Dissertation Award will have a winner and an explicit runner up.

The winner of this year's award is:
Daniel Villatoro with the thesis titled: "Social Norms for Self-Policing Multi-agent Systems and Virtual Societies", supervised by Jordi Sabater-Mir at the Autonomous University of Barcelona, Spain.

and the runner up is:
Albert Jiang with the thesis titled: "Representing and Reasoning with Large Games", supervised by Kevin Leyton-Brown at the University of British Columbia, Canada.

IFAAMAS AWARD FOR INFLUENTIAL PAPERS

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.

There are two winners of the 2012 IFAAMAS Influential Paper Award:
Michael P. Wellman (1993), A market-oriented programming enviornment and its application to distributed multicommodity flow problems, Journal of Artificial Intelligence Research, Volume 1, pp. 1-23.

Milind Tambe (1997), Towards Flexible Teamwork, Journal of Artificial Intelligence Research, Volume 7, pp. 83-124.

BEST PAPER NOMINEES

162: Group Synthesis for Parametric Temporal-Epistemic Logic Andrew Jones, Michal Knapik, Alessio Lomuscio, Wojciech Penczek. Session 4F Logics for Agency

668: Predicting Your Own Effort David F. Bacon, Yiling Chen, Ian Kash, David Parkes, Malvika Rao, Manu Sridharan. Session 4D Economies and Markets

726: Efficient Nash Equilibrium Approximation through Monte Carlo Counterfactual Regret Minimization Michael Johanson, Nolan Bard, Marc Lanctot, Richard Gibson, Michael Bowling. Session 2E Game Theory II

PRAGNESH JAY MODI BEST STUDENT PAPER NOMINEES

358: Sustaining Cooperation on Networks: An Analytical Study based on Evolutionary Game Theory Raghunandan Ananthasayanam, Subramanian Chandrasekarapuram. 4E Game Theory IV

418: Optimal Manipulation of Voting Rules Svetlana Obraztsova, Edith Elkind. 2D Social Choice II

687: Behavioral Game Theoretic Models: A Bayesian Framework For Parameter Analysis James Wright, Kevin Leyton-Brown. 4E Game Theory IV

761: Modeling and Learning Synergy for Team Formation with Heterogeneous Agents Somchaya Liemhetcharat, Manuela Veloso. 5B Teamwork

BEST INNOVATIVE APPLICATION PAPER

The winner will be announced at the conference dinner.

BEST SENIOR PROGRAM COMMITTEE NOMINATIONS

Craig Boutilier
Gal Kaminka
Ruggiero Cavallo

BEST PROGRAM COMMITTEE NOMINATIONS

Frans Oliehoek
Lirong Xia
Sebastian Stein
Sylvain Bouveret

BEST DEMONSTRATION

The winner will be announced at the conference.

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SOCIAL PROGRAMME

WELCOME PAELLA

Tuesday, 5th June / 20:30 - 22:00h.

A Valencian Paella will be cooked on-site in the University Campus, near the Lunch Area, so the attendants can taste this traditional Spanish recipe. Food and drink for this event are included in the registration fee.

The event will be livened up with live music provided by the local soul band Sanford Alligator Band.

GALA DINNER - 21:00H

Thursday, 7th June - Hotel Balneario Las Arenas *****

The Hotel Balneario Las Arenas is the only Great Luxury Five star Hotel in the Santos chain. It belongs to the select LHW Club, and it was born from the desire to claim back the beaches of Las Arenas and La Malvarrosa in the city of Valencia, combining the architectural beauty of the historical thermal spa of Las Arenas, founded in 1898, with the elegance and comfort of modern design, set in a privileged position by the sea.

With such an inviting venue for an already much-anticipated event; we are confident the Congress Dinner is one event you will not want to miss.

Bus transfer services will be provided from all the official hotels. We will meet at the hotel hall at 20:30h. Approximate return time is 23:30h.

Additional fees apply. For further information, please contact with the Registration Desk.

GENERAL INFORMATION

CITY - VALENCIA

Valencia is a traditional Mediterranean city located on the east coast of Spain of average size with a population of 800.000. Attendees visiting the city can enjoy an historic city that is a fascinating mixture of different cultures and religions that still remains alive in the numerous city's monuments and typical streets, combined with the most absolute modernity exemplified by the modern architectural area " Ciudad de las Artes y las Ciencias".

Valencia is a city for encounters and contrasts. The legacy left by the cultures and civilisations which have reached these shores in the past still remains alive in the city´s monuments and streets, not to mention in its people´s hearts.

Business and trade coexist with leisure and culture. Valencia is a city that never sleeps. It has a rich cultural life with festivals, concerts, shows and exhibitions all year round.

A city like this can be enjoyed with all five senses. Dialogues flow smoothly, ideas float back and forth easily, lines of communication are always open and people feel at their ease. Valencia invites you to indulge your passion for the art of encounters.

Valencia offers a rich cultural heritage of music, art, gastronomy, architecture and folklore, and reaching the city from any part of th globe is easy and convenient, thaks to a modern network of links with the most important European cities.

For further information about the tourism and conference facilities in Valencia, please consult Turisvalencia, created and published by the Turismo Valencia Convention Bureau.

LANGUAGE

There are two official languages in Valencia: "Valenciano", used in the Valencian Community, and Spanish, Spain's official language.

There are centres that offer specialised classes, practical training and cultural activities; in addition, they can help students with finding housing. The Association of Spanish Schools in the Valencian Region (AMEELE) brings together Spanish schools in the city of Valencia which are accredited by the Instituto Cervantes.
www.ameele.net

POSTAL SERVICES

The Central Post and Telegraph Office (Plaza del Ayuntamiento, 24) is open on weekdays from 8:30 a.m. to 8:30 p.m. and between 9:30 a.m. and 2:00 p.m. on Saturdays. Telephone: 96 310 27 30.

Stamps are also available in all tobacconists.

TIME ZONE

People generally eat later than in other European countries: breakfast (7:30 and 10:00 a.m.) is similar to the continental style. Restaurants serve lunch between 1:00 p.m. and 3:00 p.m., and dinner from 8:30 p.m. until 10:30 p.m

TIPPING

Tips are included in all prices and bills, so tipping is not considered obligatory. However, if the service received is considered satisfactory, especially in bars and restaurants, a tip is often left.

BANKS

Most banks are open from Monday to Friday between 8:30 a.m. and 2:30 p.m. Only a few branches open on Saturday mornings. There are 24-hour automatic tellers around the city, and most (Servired, 4B, etc.) offer international

CREDIT CARDS

Most hotels, restaurants and shops in Valencia accept the main credit cards such as American Express, VISA, Mastercard, 4B, Access y Diners Club.

ELECTRICITY

Standard electrical voltage in Valencia is 220-240 V AC, 50 Hz. A transformer and an adapter are necessary to use North American electrical appliances whose plugs have two square pins. Adapters are available in most hardware store.

HOW TO GET TO THE VENUE FROM THE OFFICIAL HOTELS

From hotel **Beatriz Rey Don Jaime & SH Valencia Palace & Holiday Inn Valencia** take the **bus #18** from Eduard Boscà- Port street and drop off at Tarongers – Escola de magisteri stop.

From hotel **Silken Puerta de Valencia** take the **bus #18** from Cardenal Benlloch - Pobla Farnals streets and drop off at Tarongers – Escola de magisteri stop.

From hotel **Valencia Center** take the **bus #40** from Tomàs Montañana - França street and drop off at Ramon Llull - Albalat dels Tarongers.

AIRPORT

VALENCIA INTERNATIONAL AIRPORT:

Information Service: Phone +34 961 598 500
Flights to Valencia
Distance from the airport to the city centre: 8 Km.
Approx. cost Airport-Valencia city centre taxi: 20 Euros.

AIRPORT – CITY CENTRE UNDERGROUND CONNECTION:

Line 5 Airport/Torrent Avinguda- Neptú. Every 10-20 minutes approx.
Line 3 Airport/Palmaret- Rafelbunyol. Every 10-20 minutes approx.
TIP: purchase the VLC Tourist Card from the airport's Tourist Info office, and enjoy free, unlimited urban public transport (including the Valencia-Airport route). You will also receive discounts for museums, leisure activities, shops, restaurants and more. More info: www.valenciatouristcard.com

TRAIN

ESTACIÓN JOAQUIN SOROLLA / JOAQUIN SOROLLA STATION

Adress:
C/ San Vicente Martir, 171. 46007 Valencia.
· AVE: Valencia – Madrid (1h and 34 min)
· ALVIA: Valencia - Albacete – Madrid
· EUROMED: Valencia – Barcelona (3 hours)

Conctact phones:
Station information: +34 902 43 23 43
Renfe Information & sales: +34 902 32 03 20
www.renfe.com

FURTHER INFORMATION - PUBLIC TRANSPORT

Valencia has a great bus network and it is the preferred way of getting around Valencia. Local buses run daily from 06:30-22:30.
EMT webpage: http://www.emtvalencia.es

The Metro Network in Valencia is excellent, but not too helpful for small scale travel. It does not go anywhere in the centre, and it tends to skip other important destinations, such as the City of Arts and Sciences. So it is most useful when you need to cover a long distance. In particular, it is the best way to get to the beach.
Metro maps: www.metrovalencia.com

It's quite easy to spot a taxi in Valencia; they are white and sport the word taxi on top. Spot a green light on the roof and you know they're available. Just wave your hand to flag them down You can keep an eye on the fare by looking at the meter. Taxis are relatively cheap here, but there is a minimum charge, 3.90€ during the day and 6.00€ at night. Occasionally there are some extra costs as well, at the airport or the port for example. You can see these charges written on a window sticker. Best to make sure you have change of 20€ or smaller before getting into the taxi. Drivers aren't obligated to have change for larger notes.

ROADS

Valencia is linked to all the main Spanish and European capitals by a modern road network.
AP-7 MEDITERRANEAN MOTORWAY
Connection with the European network of motorways.

VENUE

Universitat Politècnica de València is a young institution, having been in existence for 40 years and comprises 14 colleges and 10 research institutes.

The Vera Campus site is located to the north of the city of Valencia in a peaceful setting that borders with traditional farmland. It consists of nearly 60 buildings arranged in an orderly manner around the Agora, which is the centre of life on the campus. There are over 108 000 square metres of green spaces that house an open-air museum of sculpture.

The sports facilities include an indoor swimming pool, a sports complex, a gymnasium, a running track, a Valencian pelota court (trinquet), a cycling track and several tennis and paddle tennis courts. It has all the facilities needed to provide high quality higher education. AAMAS Conference will take place at the Paranimf Building (Building 3A) and Technical sessions, workshops and tutorials will be in the computer science school (Escuela Técnica Superior Ingeniería Informática (Building 1G)

ADDRESS

Universitat Politècnica de València
Camino de Vera, s/n
46022 Valencia
www.upv.es

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