## Introduction

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 is the premier forum for research in the theory and practice of autonomous agents and multi-agent 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), Taipei (2011), Valencia (2012), Saint Paul (2013), and Paris (2014). This volume constitutes the proceedings of AAMAS 2015, the fourteenth conference in the series, held in Istanbul in May 2015.

In line with previous editions, AAMAS 2015 attracted submissions for a general track and four special tracks: Innovative Applications, Robotics, Virtual Agents and Humans, and the Blue Sky Ideas track. The special tracks were chaired by leaders in their corresponding fields: Amal El Fallah Seghrouchni and Milind Tambe chaired the Innovative Applications track, Alessandro Farinelli and Gal Kaminka the Robotics track, Catholijn Jonker and Rui Prada the Virtual Agents and Humans track, and Victor Lesser the Blue Sky Ideas track. The special track chairs were responsible for appointing the Programme Committee (PC) members and the Senior Programme Committee members (SPC) for their tracks, and they made acceptance/rejection decisions for their tracks in consultation with Programme Chairs based on input provided by the track PC and SPC. Members of the PC and SPC of the special tracks also reviewed papers on topics of their expertise submitted to the general track.

Full paper submissions (8 pages plus bibliographic references) and Blue Sky Ideas paper submissions (4 pages plus references) were solicited for AAMAS 2015. Some of the full paper submissions were accepted as extended abstracts (2 pages). The papers were selected by means of a thorough review and discussion process, which included an opportunity for authors to respond to reviewer comments. All SPC members followed and contributed to the technical discussions on the papers they were overseeing.

AAMAS 2015 attracted a large number of high-quality submissions; the result of the reviewing process is summarised by the following table:

Track	Reviewed	Accepted as		Accepted as	
		full papers		extended abstracts	
Main Track Papers	520	127	24%	122	23%
Innovative Applications	47	15	32%	6	13%
Robotics	45	12	27%	9	20%
Virtual Agents and Humans	40	10	25%	10	25%
Blue Sky Ideas	18	3	17%	N/A	

Overall, out of 670 submissions, 167 (25%) were accepted as full papers and 147 (22%) were accepted as extended abstracts.

The acceptance rates by a paper's primary high-level keyword from the conference topics of interest are:

Topics	Reviewed	Accepted as full papers		Accepted as extended abstracts	
Agent Societies and Societal Issues	47	10	21%	11	23%
Agent Theories and Models	59	14	24%	14	24%
Agent-based Simulation	66	6	9%	17	26%
Agents and Mainstream Computing	12	2	17%	3	25%
Communication and Argumentation	22	5	23%	3	14%
Cooperation	50	13	26%	7	14%
Economic Paradigms	138	46	33%	32	23%
Engineering Agent-Based Systems	19	4	21%	1	5%
Innovative Applications	54	13	24%	7	13%
Knowledge Representation and Reasoning	36	7	19%	8	22%
Learning and Adaptation	51	14	27%	14	27%
Robotics	53	15	28%	11	21%
Verification and Validation	14	5	36%	4	29%
Virtual Agents and Humans	49	13	24%	15	31%

Full papers were presented orally in 15-minute slots; all extended abstracts and, optionally, full papers were presented as posters during the conference.

Out of the 670 submissions, 395 (59%) had a student as the primary author, 108 of these (27%) were accepted as full papers, and a further 91 (23%) were accepted as extended abstracts.

The proceedings also contain 30 Demonstration papers, 29 Doctoral Consortium papers, as well as abstracts of the invited talks and details of some of the awards given. The overall conference programme also had 26 workshops and 8 tutorials, although that material is not included in the proceedings.

We would like to thank the authors in our and closely-related communities for submitting a large number of top-quality papers, the PC and SPC members, additional reviewers, and the track chairs for their dedication in reviewing the submissions and for engaging in the technical discussions held during the reviewing process. We are indebted to Dave Shield for assisting us with ConfMaster throughout the process. We also thank Neil Yorke-Smith for arranging the conference proceedings and all the members of the local organising committee for their industrious work without which the conference would not have been possible.

Rafael H. Bordini and Edith Elkind

**Gerhard Weiss and Pinar Yolum** 

AAMAS 2015 Programme Chairs

AAMAS 2015 General Chairs