


ARTIFICIAL INTELLIGENCE SYMPOSIUM ON THEORY, APPLICATION & RESEARCH

Preliminary Programme

CEST	TUESDAY (OCT 5)	WEDNESDAY (OCT 6)	GMT-4	GMT+8	
09:00 AM	<p>Welcome and Introduction</p> <p>Introduction of MERCK</p> <p>Introduction of GSI</p> <p>Introduction of ESA</p>	<p>Session opening</p>	03:00 AM	15:00 PM	
10:00 AM	<p>Keynote 1</p> <p><i>Explainable and Trustable AI</i></p>	<p>Tech Talk 4</p> <p><i>Hybrid operational digital twins for complex systems</i></p> <p>Prof. Dr. Olga Fink</p>	<p>Tech Talk 9</p> <p><i>AI & Ethics</i></p>	04:00 AM	16:00 PM
11:00 AM	<p>Keynote 2</p> <p><i>AI as a means for Intelligence Amplification and Augmentation</i></p> <p>Prof. Dr. Andreas Dengel</p>	<p>Tech Talk 5</p> <p><i>Deep Learning: Graph Networks</i></p> <p>Dr. Marcel Kunze</p>	<p>Tech Talk 10</p> <p><i>AI robotics for sustainable space exploration and exploitation</i></p> <p>Prof. Yang Gao</p>	04:00 AM	16:00 PM
	<p>Break</p>	<p>Poster session opening</p> <p>Virtual poster session</p> <p>Break</p> <p>Virtual poster session</p>		05:00 AM	17:00 PM
12:00 PM	<p>Tech Talk 1</p> <p><i>Explainable and Trustable AI</i></p>	<p>Tech Talk 6</p> <p><i>Application of Machine Learning Analysis Techniques in Particle Physics</i></p> <p>Dr. Jeremy Wilkinson</p>	<p>Tech Talk 11</p> <p><i>Digital Twins of Matter under Extreme Conditions</i></p> <p>Dr. Michael Bussmann</p>		
	<p>Tech Talk 2</p> <p><i>Dependability & AI</i></p> <p>Dr. Roland Heinesch & Frank Poignee</p>	<p>Tech Talk 7</p> <p><i>AI Planning & Scheduling for Intelligent Decision-Making Support and Optimization</i></p> <p>Dr. Simone Fratini</p>	<p>Tech Talk 12</p> <p><i>Healthcare</i></p> <p>Prof. Dr. Michelangelo Canzoneri</p>	06:00 AM	18:00 PM
	<p>Tech Talk 3</p> <p><i>AI & Ethics</i></p>	<p>Tech Talk 8</p> <p><i>Natural Language Processing & Understanding in Space: Progress & Challenges Ahead</i></p> <p>José Manuel Gómez-Pérez</p>	<p>Tech Talk 13</p> <p><i>Pragmatically Radical Digitalization</i></p>		
13:00 PM	<p>Closing</p>	<p>Track summary and closing</p>		07:00 AM	19:00 PM

THEME

- HUMAN IMPACT
- RESEARCH, METHODS AND ALGORITHMS
- AREAS OF APPLICATION

 Great Speaker, we're waiting for a final confirmation. Stay tuned!

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Confirmed Titles and Speakers

HUMAN IMPACT

Dependability & AI

Dr. Roland Heinesch
Customer & Teams Manager, Infoteam software AG
Frank Poignee
Consultant Safety/Chief Engineer, Infoteam software AG

RESEARCH, METHODS AND ALGORITHMS

AI as a means for Intelligence Amplification and Augmentation

Prof. Dr. Prof. h.c. Andreas Dengel
Executive Director, Deutsches Forschungszentrum für Künstliche Intelligenz (DFKI)

Hybrid Modelling **Hybrid operational digital twins for complex systems: integrating deep learning algorithms with structural inductive bias and physics**

Prof. Dr. Olga Fink
Chair/Chair of Intelligent Maintenance Systems, ETH Zürich

Deep Learning **Graph Networks**

Dr. Marcel Kunze
Scientist, Heidelberg University Graph Networks

Data Science & Data Analytics **Application of Machine Learning Analysis Techniques in Particle Physics**

Dr. Jeremy Wilkinson
Postdoctoral Researcher, GSI Helmholtzzentrum für Schwerionenforschung GmbH, Darmstadt

Planning and Scheduling **AI Planning and Scheduling for Intelligent Decision-Making Support and Optimization**

Dr. Simone Fratini
Senior Research Engineer, Solenix Engineering GmbH

Natural Language Processing **Natural Language Processing and Understanding in Space: Progress and Challenges Ahead**

José Manuel Gómez-Pérez
Director, Language Technology Research Expert.ai

AREAS OF APPLICATION

Automation and autonomy **AI robotics for sustainable space exploration and exploitation**

Prof. Yang Gao
Professor of Space Autonomous Systems, Head of STAR LAB Surrey Space Centre, University of Surrey, UK

Simulation and Digital Twin **Digital Twins of Matter under Extreme Conditions**

Dr. Michael Bussmann
Founding Manager Center for Advanced Systems Understanding, Helmholtz-Zentrum Dresden - Rossendorf

Healthcare **Prof. Dr. Michelangelo Canzoneri** Global Head of Digital Data Healthcare business of Merck