

MESAS 19

MODELLING & SIMULATION FOR AUTONOMOUS SYSTEMS WORKSHOP

29-31 October 2019 PALERMO

Modelling & Simulation for Autonomous Systems (Scientific Conference) 2019

Inter-domain and Multi-disciplinary exchange of
knowledge within Modelling & Simulation and
Robotics communities of interest

For enquiries about the conference contact the
Event Manager or visit the official website
<https://www.mscoe.org/event/mesas-2019>



TECHNICAL SPONSORS 2019



AIM



MESAS'19 is a three-day conference event gathering respected experts from Military, Academia, and Industry with the objective to foster the use of Modelling and Simulation Tools for the integration of Systems with Autonomous Capabilities (AxS) into Operations.

CALL FOR PAPERS



NATO M&S COE is proud to invite International Researchers and Technicians from Academic, Industrial and Military Centers to submit extended abstracts of innovative scientific research works. Submitted abstracts will be evaluated by the members of MESAS'19 Technical Committee (TC). Authors of accepted abstracts will be asked to prepare a full paper version by using LCNS Springer template and to present their work during the MESAS'19 Conference. Presentations will be ran in plenary and parallel sessions. Accepted full papers will be included in the Conference Proceedings, which are indexed in the ISI Conference Proceedings Citation Index - Science (CPCI-S) and in the EI Engineering Index (including Compendex and Inspec databases).

ADVANCED RESEARCH DIRECTIONS FOR DEFENSE AND CIVILIAN APPLICATIONS



Novel research and technological contributions or advancements are recommended. Overviews of ongoing research and approaches are also welcome.

ORGANIZER



The NATO M&S COE is a recognized international military organization activated by the North Atlantic Council in 2012 and is not under the NATO Command Structure. Partnering Nations provide funding and personnel for the Centre through a Memorandum of Understanding. Czech Republic, Italy, Germany, and the US are current Members and other Nations are in consideration.

The NATO M&S COE supports NATO Transformation by improving the networking of NATO and Nationally owned M&S systems, promoting cooperation between Nations and Organisations through the sharing of M&S information and serving as an international source of expertise. The NATO M&S COE seeks to be a leading world class Organization, providing the best military expertise in M&S technology, methodologies and the development of M&S professionals.

Important remark: MESAS'19 is fully supported by the NATO ACT Autonomy Program.

IMPORTANT DATES AND LOCATION



March 2019

Call for Papers

27 April 2019

Abstract Submission Deadline

26 September 2019

Notification of Acceptance

11 August 2019

Full Paper Submission

29-31 October 2019

MESAS'19 Conference in Palermo, ITALY

TOPICS



Following the outcomes of previous editions and towards new directions, main topic for the year 2019 are:

AxS/AI in Context of Future Warfare and Security Environment (Concepts, Applications, Standards, etc.)

- *Autonomous Systems Strategy and Concept Develop. and Implementation in all Domains of Operation*
- *Advances in AI and its Impact on Future Operations*
- *The Role of the Robots and Foot Soldier in the Future Operations*
- *Security, Use of AxS as Lethal Instruments, Safety of Aviation*
- *Ethical, Psychological, Legal and Operational Aspects, CIMIC*
- *Cyber Security (in Context of AxS and their Applications)*

M&S of Intelligent Systems - R&D and Application

- *Autonomous Tactical Behaviour*
- *Math Modelling and Simulation of AI Tasks*
- *RT Issue and Reality Gaps in Context of New AI Concepts, M&S of Future Operational Tasks*
- *Multi-robot Systems/Swarms, Benefits, Threats, and Challenges*
- *AI/machine-learning of the systems through M&S*
- *Distributed Control for Multi-robot Systems*
- *Robust Decision Making via Cooperative Estimation*
- *Relevant Concepts and Experiments*
- *Concepts and Visions of Future Warfare and Application*
- *M&S in Capability Evaluation of Robotic Swarms*
- *Co-simulation Tools for Multi-domain Analysis*
- *Effectiveness, Reliability, and Cyber-Security Issues*

Future Challenges of Advanced M&S Technology

- *Key Challenges of the Research and Development*
- *Capability Dev. in Context of Future Ops and Social Environment*
- *Man versus Computer, Advanced M&S Projects*
- *Future Technology and Impact on Society*
- *Validation and verification process for Autonomous functions (V&V via M&S)*

ABSTRACTS & REGISTRATION



Authors are invited to send abstracts via the Springer OCS System (refer to the Call for Papers tab at:

<https://www.mscoe.org/event/mesas-2019/call-for-paper/>)

Registration fee will be specified on Conf. Webpage.

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