

PAPER SUBMISSION:

Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other journals.

All papers will be reviewed following standard reviewing procedures for the Journal.

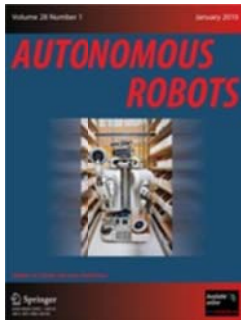
Papers must be prepared in accordance with the Journal guidelines:
<http://www.springer.com/10514>

Manuscripts must be submitted to: <http://AURO.edmgr.com>.
Choose "Distributed Robots" as the article type.

Important Dates

- **Paper submission deadline:**
January 15, 2017
- **Notification to Authors:**
April 15, 2017
- **Revised papers due:**
May 15, 2017
- **Final decision:**
June 30, 2017

www.Springer.com/10514



ISSN: 0929-5593

Editor-in-Chief
Gaurav Sukhatme
University of Southern
California

 **Springer**
science+business media

AUTONOMOUS ROBOTS

~Special Issue Call for Papers~

Distributed Robots: From Fundamentals to Applications

Guest Editors:

Roderich Gross (r.gross@sheffield.ac.uk), The University of Sheffield, UK

Spring Berman (Spring.Berman@asu.edu), Arizona State University, USA

Emilio Frazzoli (frazzoli@mit.edu), MIT, USA

Andreas Kolling (a.kolling@sheffield.ac.uk), The University of Sheffield, UK

Alcherio Martinoli (alcherio.martinoli@epfl.ch), EPFL, Switzerland

Fumitoshi Matsuno (matsuno@me.kyoto-u.ac.jp), Kyoto University, Japan

Distributed robotics is an interdisciplinary and rapidly growing area, combining research in computer science, communication and control systems, and electrical and mechanical engineering. Distributed robotic systems can autonomously solve complex problems while operating in highly unstructured real-world environments. They are expected to play a major role in addressing future societal needs, for example, by improving environmental impact assessment, food supply, transportation, manufacturing, security, and emergency and rescue services.

This special issue aims at presenting state-of-the-art research in distributed robotics, leading to advances in technologies, algorithms, system architectures, and applications.

We are soliciting contributions in all areas of distributed robotics – from fundamentals to applications. Topics of interest include, but are not restricted to:

- Applications of distributed robotics in defense, education, entertainment, environmental monitoring, exploration and inspection, healthcare, manufacturing, mining, search and rescue, service, smart cities, transportation, warehousing etc.
- Architectures for teams of robots
- Distributed control and planning
- Distributed cooperative action
- Distributed cooperative perception
- Distributed decision making
- Distributed robotic systems operating on land, sea, and air
- Hybrid symbiotic teams (humans and robots, animals and robots)
- Learning and adaptation in teams of robots
- Localization and navigation in multi-robot systems
- Modular reconfigurable robots
- Multi-robot and multi-vehicle motion coordination
- Networking issues in multi-robot systems
- Performance metrics for robot teams
- Self-organizing and self-assembling robotic systems
- Sensor and actuator networks
- Smart materials
- Swarm robotics systems
- Wireless and robotic sensor networks