

## Special Session

# Aerial robotics in close interaction between vehicles and environment

### Description/Scope

Society is slowly but steadily adopting aerial robotics as part of its daily life, which brings about interesting challenges for the interaction of these vehicles with each other, with the surrounding environment, and with people. This ability of aerial robots to interact with the environment and other vehicles has many potential applications, including search and rescue, environmental monitoring, and package delivery. In this invited session, we aim to bring together researchers from academia and industry to discuss recent advances in aerial robotics and the close interaction between vehicles and with the environment.

### Topics (but are not limited to)

- Perception strategies for aerial robots in close interaction with objects and the environment;
- Filtering and sensor fusion methods for aerial robots in complex environments;
- Planning and decision-making algorithms for aerial robots in complex environments;
- Control strategies for aerial robots in close proximity to objects and other vehicles;
- Cooperative control of multiple robots in close interaction with each other and with the environment;
- Applications of aerial robots in close interaction with objects and the environment.

### Organizers

- Bruno J. Guerreiro, CTS-UNINOVA and ISR-LARSyS, NOVA School of Science and Technology, Caparica, Portugal
- Rita Cunha, ISR-LARSyS, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal
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