



SWARMs Conference on Novel Solutions for Underwater Vehicles in Autonomous Sea Operations

## **Date and Venue**

June, 11<sup>th</sup> 2018 at Centre for Robotics and Intelligent Systems, University of Limerick, Ireland (co-located with EMRA-2018: Workshop On EU-funded Marine Robotics and Applications -12<sup>th</sup> and 13<sup>th</sup> June, 2018-). Registration is free but mandatory. You can find more information here: <a href="http://swarms.eu/conference.html">http://swarms.eu/conference.html</a>

## **Topics**

We invite submissions in the area of solutions for underwater vehicles in autonomous sea operations, including (but not limited to) the following topics:

- Development methodologies and novel designs for autonomous maritime missions including HMI designs, data formatting and transfer challenges.
- Distributed platform and architectures for integrating and coordinating underwater robotics vehicles: data modelling and context awareness, Industrial IoT middleware solutions.
- New solutions for sensors and processing algorithms for underwater environments: data processing,
   3D mapping, landmark extraction, map matching, relocation.
- New solutions for underwater communication systems: advanced networking, integrated over and underwater communications, high speed underwater communication, integration of heterogeneous underwater communication systems.
- Design and development of embedded architecture and mission management solutions: mission management (planning, re-planning, monitoring, etc.), software architecture and its evaluation over simulated, experimental or real scenarios.
- Autonomous navigation and semi-autonomous manipulation: simulation tool for underwater vehicles, motion planning, hybrid acoustic and radio frequency communication and control for homing applications.

## **Submission Guidelines**

• Submission system: <a href="https://easychair.org/conferences/?conf=swarmsconf2018">https://easychair.org/conferences/?conf=swarmsconf2018</a>

• Submission deadline: May, 14th

Paper acceptance notification: May, 21<sup>st</sup>

## **Organizing Committee** (not definitive list):

- <u>Dr. José-Fernán Martínez-Ortega</u> (Chairman)
  Associate Professor
  ETSI y Sistemas de Telecomunicación
  DTE, Universidad Politécnica de Madrid
- Dr. Pedro Castillejo Parrilla
   GRyS Researcher
   ETSI y Sistemas de Telecomunicación
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- Dr. Raúl Mario del Toro Matamoros
   GRyS Researcher
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- Joaquim Manuel C. S. Bastos
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