

WS2 - Robot-based inspection systems and post-processing tools

IEEE ETFA 2020 (Vienna, Austria)

Workshop Programme

Date: **September 8th 2020, 9:00h**

09:00 – 09:15 *Workshop opening* – Enrico Carrara and Alberto Ortiz, Workshop organizers

09:15 – 10:15 **SESSION 1: Robotic technologies for inspection of ships**

09:15 *Robotics Technology for Inspection of Ships*

Enrico Carrara, Alessandro Grasso (RINA Services S.p.a., Italy)

09:35 *Assessment of ship robotic inspections*

Laura Poggi, Cesare Mario Rizzo, Tomaso Gaggero, Marco Gaiotti, Enrico Ravina
(University of Genova - DITEN, Italy)

09:55 *Evaluation of a Skill-based Control Architecture for a Visual Inspection-oriented Aerial Platform*

Emilio Garcia-Fidalgo, Francisco Bonnin-Pascual, Joan P. Company-Corcoles,
Alberto Ortiz (University of the Balearic Islands, Spain)

10:15 – 10:30 *Break*

10:30 - 11:30 **SESSION 2: Solutions for generic and alternative inspection scenarios**

10:30 *MAV tele-operation constrained on virtual surfaces for inspection of infrastructures*

Florian Dietrich, Julien Marzat, Martial Sanfourche, Sylvain Bertrand, Antheleme Bernard-Brunel, Alexandre Eudes (Onera, France)

10:50 *Accurate Identification of 3D Pose through Reprojection onto a Single Image from Mask-RCNN Contour*

Gabriele Baris, Carlo Alberto Avizzano (Scuola Superiore Sant'Anna, Italy)

11:10 *Knowledge-Based Service-Oriented System for the Automated Programming of Robot-Based Inspection Systems*

Alejandro Magaña, Silvia Gebel, Philipp Bauer, Gunther Reinhart
(Technical University of Munich, Germany)

11:30 *Workshop closing*