

HIGH SPEED MARINE VEHICLES

Naples, 23-25 October 2023



HSMV 2023 Programme at Glance



THE ROYAL
INSTITUTION
OF NAVAL
ARCHITECTS

HSMV 2023 13th Symposium High Speed Marine Vehicles, Technical Programme



University of Naples Federico II, Centro Congresso, Via Partenope 36

23rd October

24th October

9:00 -9:30

Registration

SESSION 4: Experimental Hydrodynamics, chaired by Prof. Fabio De Luca
Pedisa Buca, *Influence of Stern Trim Control Devices upon Resistance of High Speed Vessels*
Mauro et al., *Shallow Water Resistance Estimation for Semi-Displacement Slender Ships*
Keser et al., *The Design, Production, Verification, and Calibration of an Elastic Model of a Catamaran for Hydroelastic Experiments*
Wang et al., *Development and Testing of a Free Running Model for Experimental Hydrodynamic Study of Planing Boat*

9:30: 10:30

Opening Ceremony

Keynote 1: **Maggi et al.**, *Preliminary design of a new Coast Patrol Vessel Class with a SWATH shape*
 Keynote 2: **Portolano A.**, *Impact of New Regulation on Shipping Company*

10:30 - 11:00

Coffee Break

Coffee Break

11:00 – 12:30

SESSION 1: Planing Hydrodynamics, chaired by Prof. Ermina BEGOVIC
Garme, *Warp Effects and Bow Submergence; over the Limit for a 2D+1 Strip Model of HSC?*
Bonci & De Jong, *High-Speed RHIB Seakeeping Analysis Using Non-Linear Time Domain Simulations and Systematic Hull Parametrization*
Bilandi et al., *Stepped Hulls Early Stage Design by Implementing 2D+T Method*
Bašić et al., *Novel Approach for Simulating Planing Using Lagrangian CFD*

SESSION 5: Ship Design, chaired by Dr. Igor BACKALOV
Godó & Steen, *A Comparative Study of the Energy Efficiency of Hydrofoil Vessels and Slender Catamarans*
Coppola et al., *Feasibility Study of a Zero-Emission Passenger Catamaran Ferry Operating in Italian Coastal Island*
Coppola et al., *Methanol and Fuel Cell for Cold Ironing Achieving Emission Reduction and Its Economic Assessment*
Altunсарay et al., *Ways of Weight Optimization for Polymer-Based Composite High-Speed Marine Vehicles*

12:30 – 14:00

Lunch Break

Lunch Break

14:00 – 15:30

SESSION 2: Resistance and Manoeuvring of Fast Ships, chaired by Prof. Abbas DASHTIMANESH
Bozzo & Villa, *A Fast Numerical Procedure to Design the Shaftline Struts*
Bilandi et al., *How to Improve Full-Scale Self-Propulsion Simulations? A Case Study on a Semi-Displacement Hull*
Begovic et al., *Determination of Hydrodynamic Manoeuvring Coefficients of a Planing Hull Using CFD with the Aid of SDT*
Ambrosino et al., *Prediction of Manoeuvring Characteristics in the Concept Design of a Destroyer*

SESSION 6: Comfort on Board and Regulatory Framework, chaired by Prof. Karl GARME
Peri, *A Smart Materials Driven Approach to the Interior Design of Cruise Ships*
Ilic & Backalov, *Surf-Riding of Ships from the MARIN Series of Fast Displacement Ships*
Begovic et al., *Application of ISO 22834 for Comfort Assessment on a Large Yacht*
De Alwis & Garme, *Feasibility of Using Kidney-Belt-Mounted Accelerometers for Measuring Shock and Vibration Exerted on the Lumbar Spine Region of High-Speed Marine Craft Occupants*

15:30 – 16:00

Coffee Break

Coffee Break

16:00 -17:30

SESSION 3: Marine Engines and Alternative Fuels, chaired by Prof. Vincenzo CRUPI
Ceglie et al., *Employing Artificial Neural Network for Process Signal Estimation in the Monitoring of Smart Shipboard Diesel Engine Systems*
Padolecchia et al., *Feasibility Study for the Fuel Switch of a Fast Ferry*
Zivieri et al., *Magnetic Signature Analysis of the Propulsor of a Military Ship*
Acanfora et al., *A Methanol Fueled Marine Engine Simulator for Fast Craft Applications*

SESSION 7: Computational Fluid Dynamics, chaired by Prof. Simone MANCINI
Lau et al., *Ride-Control Systems Geometries on a High-Speed Catamaran Using a CFD Forcing Function Method*
Akinmulewo et al., *Numerical Investigation of the Influence of the Axial Position of the Propeller on the Propulsion Performance and the Hull-Propeller Interaction Using the Body-Force-Method*
Eslamdoost & Vikström, *Energy Balance Approach for Studying Waterjet-Hull Interaction Effects*

GROUP PHOTO

20:00 – Gala dinner at La Bersagliera 1919, Borgo Marinari, 10/11