

12<sup>th</sup> Symposium on  
High-Performance Marine Vehicles – “Technologies for the Ship of the Future”



Cortona / Italy, 12-14 October 2020



**Topics:** advanced design & production technology / shipyard 4.0 / future materials / ultra-efficient ships / alternative fuels / electric ships / renewables / future use of oceans / blue economy / future shipping scenarios / intelligent & connected ships / unconventional designs & propulsion concepts / biomimetic marine technologies

**Organiser:** Volker Bertram ([volker.bertram@dnvgl.com](mailto:volker.bertram@dnvgl.com))

**Advisory Committee:**

<b>Carlo Bertorello</b>	Naples University	<b>Robert Hekkenberg</b>	TU Delft	<b>Prasanta Sahoo</b>	FIT
<b>Emilio Campana</b>	CNR	<b>Thomas Hildebrandt</b>	Numeca	<b>Pierre Sames</b>	DNV GL
<b>Andrea Coraddu</b>	Strathclyde Univ	<b>Jiulun Liu</b>	Wuhan Univ Technology	<b>Noah Silberschmidt</b>	Silverstream Technologies
<b>Robert Dane</b>	Ocius	<b>Kohei Matsuo</b>	NMRI	<b>Teus van Beek</b>	Wärtsilä
<b>Stefan Harries</b>	Friendship Systems	<b>Sean McCartan</b>	Coventry University		

**Venue:** The conference will be held at the Oasi Neumann hotel in Cortona

**Format:** Papers to the above topics are invited and will be selected by a selection committee. Proceedings will be electronic pdf version in colour.

**Deadlines:** anytime Optional “early warning” of interest to submit paper  
15.6.2020 First round of abstract selection (1/3 of available slots)  
**15.7.2020 Second round of abstract selection (remaining 2/3 of slots)**  
15.9.2020 Payment due for authors  
15.9.2020 Final papers due (50 € surcharge for late submission)

**Fees:** **600 € / 300 €** regular / PhD student – early registration (by 15.9.2020)  
**700 € / 350 €** regular / PhD student – late registration

Fees are subject to VAT (reverse charge mechanism in Europe)  
Fees include proceedings, lunches and coffee breaks  
Fees apply also to authors

**Sponsors:** Numeca – further to be announced

**Media Partner:** Hansa

**Information:** [www.hiper-conf.info](http://www.hiper-conf.info)

## **Selected feedback on intended contributions**

Aksana Barsukova (Anemoi Marine Technologies)  
*Flettner-Rotor installation on large bulk-carrier*

Carlo Bertorelli (Univ Naples)  
*Fully electric working boat – Design and tests*

Emilio Campana (CNR)  
*Trends for Future Ships and How they Affect Research in Italy*

Andrea Coraddu (Univ Strathclyde)  
*A hybrid data driven approach using A.I. for diesel engine monitoring*

Robert Dane (Ocius)  
*The current and future role for solar, wind and wave energy powering autonomous vessels*

Nick Danese (Syrkkle), Alexander Vannas (Alleantia)  
*Intelligent Industrial Internet of Things & Services (IIIoT&S)*

Udi Erell (Phinergy)  
*Aluminum-air battery technology to electric vessels*

Marcus Göttsche (SMILE-FEM)  
*3d printed ship parts*

Juan Gomez Trillos, Thomas Vogt (DLR)  
*The Dawn of the Era of Hydrogen for Ship Propulsion*

Andrew Gordon (Aveva)  
*Data acquisition and analysis for digital twins*

Stefan Harries (Friendship Systems)  
*Hydrodynamic Instabilities of Fast Monohulls*

Robert Hekkenberg, NN (TU Delft)  
*Unmanned ships – Cool designs meet sober engineering*

Thomas Hildebrandt (Numecca)  
*AAA CFD - Anytime, Anywhere for Anybody*

Karsten Hochkirch, Stefan Deucker, Volker Bertram (DNV GL)  
*The future starts now – Advanced design approaches for advanced ships*

Hasso Hoffmeister (DNV GL)  
*Wind assisted ships – Challenges and opportunities*

Jan Kelling (Hasytec Electronics)  
*The silent revolution in biocide-free antifouling*

Jiulun Liu, NN (Wuhan University of Technology)  
*Navigational Brain System for unmanned shipping projects*

Claudio Lugni (NTNU)  
*Bio-inspired hydrodynamic solutions for maritime hydrodynamic problems*

Sean McCartan (Univ Coventry)  
*Rex – 280m Next Generation Sustainable Luxury Pentamarian Transatlantic Superliner*

Rodrigo Perez-Fernandez, Jesus Munoz (Sener)  
*A.I. Technologies Applied to Ship Design and Production*

Volkmar Stenzel, Claus Schreiner (Fraunhofer IFAM)  
*Bio-inspired ship coatings to reduce drag – Looking back and looking forward*