

Monday, 11 May 2020

Session: Out Among the Stars – Chair: Koelman

- 08:35h Perez, Munoz (SENER)
How to Achieve Smart Ship Design through Industry 4.0
- 09:00h Gresens, Zerbst (PROSTEP)
How to Achieve Data Integrity in Ship Design through a Unified Data Model
- 09:25h Van Os (Siemens)
Angels and Demons
- 09:50h Harries (Friendship Systems)
Shape Optimization using CFD – State of the Art and Trends
- 10:15h Coffee Break**
Session: Wide Open Road – Chair: Zerbst
- 10:45h Gaspar (NTNU)
Open and Collaborative Ship Design
- 11:10h Hollister (New Wave Systems)
WebGL Open Framework for Collaborative Software Development
- 11:35h Palaversa, Prebeg, Andric (University of Zagreb)
Opportunities of Using Open-Source FEA Software in Ship Structural Design
- 12:00h Smogeli, Ludvigsen (DNV GL), Vik (Kongsberg Maritime), Nordahl, Kyllingstad (SINTEF Ocean), Zhang (NTNU)
Open Simulation Platform: An Ecosystem for Digital Twin System Simulations
- 12:30h Lunch** - Pici all'aglione
Tiramisu
- Session: In 3d – Chair: Harries**
- 13:45h Koch, Kreutzer, Roppelt (Atlantec Enterprise Solutions)
Rapid One-Of-A-Kind Project Planning Suite
- 14:10h Blom (Blom Maritime)
Digital Twins based on Ultra-high Resolution 3d Scans
- 14:35h Borczyk (NED-Project)
Combine & Conquer: 3D Tools for Ship Design
- 15:00h Nordby, Gernez (Oslo School of Architecture & Design)
Augmenting OpenBridge: An Open User Interface Architecture for Augmented Reality Applications on Ships Bridges
- 15:25h Coffee Break**
Session: Even Better than the Real Thing – Chair: Blom
- 15:55h Goh (Knud E. Hansen)
Testing Virtual Reality for Design Collaboration and Review
- 16:20h Garcia, Ebrahimi, Brett (Ulstein International)
The Potential of Virtual Reality Tools in Conceptual Ship Design
- 16:45h Petersen (MAN Energy)
Enhancing the Quality and Reliability of Maintenance Operations using Mixed Reality

17:10h Friedewald, Rost, Meluzov (TU Hamburg)

We thank our sponsors: Aveva, BLOM Maritime, Friendship Systems, Korean Register, Prostep, SARC, SENER, Siemens, Tutech Innovation

Holistic Maintenance Support with a Digital Assistance System

17:35h Compit Award 2020 given to tbd

Tuesday, 12 May 2020

Session: When Tomorrow Comes – Chair: Perez

- 08:10h Elg, Mettälä, Tammero, Arjava (Deltamarin)
The Untapped Potential of Digital Twins in Ship Concept Design
- 08:35h McNatt, Ma (MAESTRO Marine), Danese (NDAR)
MAESTRO: Ship Structure Evolutive Digital Twin for the Full PLM Cycle
- 09:00h Danese, Dardel (NDAR), Morais (SSI)
Platform-of-Platforms and Symbiotic Digital Twins: Real Life Practical Examples and a Vision for the Future
- 09:25h Erikstad (NTNU), Drazen (NSWC), Grimstad (SAP)
Design Patterns for Operational Intelligence Based on Digital Twins - Combining Physics and Data Science for Industrial Applications
- 09:50h Bekker, Kruger, Taylor (Stellenbosch University)
Mariner 4.0: Integrating Seafarers into a Maritime 4.0 Environment
- 10:15h Coffee Break**
Session: Drive on – Chair: Van Os
- 10:45h Matsuo (NMRI), Tanigawa (ASAKAWA Shipbuilding)
Modeling of Work in Shipbuilding by Production Simulation
- 11:10h Shinoda, Tanaka, Kishigami (Kyushu University)
3d Work Simulation for Shipyard Sub-assembly Processes
- 11:35h Kil, Cho, Lee, Byun (Korean Register)
Development of 3D Model-Based Design Approval System
- 12:00h Astrup (DNV GL)
3D Models Replacing Traditional 2D Drawings as Design Documentation
- 12:30h Lunch** – Lasagna alla verdure
Panna cotta
- Session: I just thought you'd like to know – Chair: Bole**
- 13:45h Pellegrini, Serani, Ficini, Broglia, Diez (CNR), Wackers, Visonneau (ECN)
Adapt, Adapt, Adapt: Recent Trends in Multi-fidelity Digital Modelling for Marine Engineering
- 14:10h Gatin (In Silico), Jasak (Wikki)
Cloud Towing Tank: Democratising CFD for Ship Design and Operation
- 14:35h Cady (SIREHNA)
Antifragile Architectures
- 15:00h Delre (fdquadro)
SHIP Ship Holistic Integration Platform
- 15:25h Coffee Break**

Session: Wir sind die Roboter (The Robots) – Chair: Caiti

- 15:55h Stensrud (DNV GL)
ADRASSO – Intelligent, Autonomous Drone for Ship Inspection
- 16:20h Oliveira, Ramos, Coutinho, Lourenço de Souza, Caprace (UFRJ/COPPE)
A Deep Learning Approach for Automatic Identification of Subsea Events using AUV Data
- 16:45h Bibuli, Caccia, Ferretti, Odetti (CNR)
Evolution of Autonomous Surface Vehicles
- 17:10h Stein (Kühne Logistics University)
Combining Unmanned Aerial Vehicles and 3D Mapping of Port Infrastructures
- 17:35h Bertram
Announcement of Compit 2021

Wednesday, 13 May 2020

Session: What is man? – Chair: Hekkenberg

- 08:35h Bekker (Stellenbosch University), Ligthelm (Ship2Shore Marine Connection)
A Ship at its Limit? - Sensor Data vs. Human Intelligence
- 09:00h Eriksen (University of Southern Denmark)
On-board Human Operators: Liabilities or Assets?
- 09:25h Van den Broek, Griffioen, Van der Drift (Univ Applied Sciences Rotterdam)
Meaningful Human Control in Autonomous Shipping - An Overview
- 09:50h De Vos, Hekkenberg (TU Delft)
Towards Suitable Regulations for Autonomous Ships – A Statistical Evaluation of the Risk of Losing Life at Sea

10:15h Coffee Break

Session: Don't Mess with the MASSionary Man – Chair: tbd

- 10:45h Orvieto (ZF Marine Propulsion Systems)
Autonomous Driving for Marine Applications: Parallels, Considerations, and Challenges Compared to the Automotive Industry
- 11:10h Abaei, Hekkenberg (TU Delft)
Effective Maintenance Strategy for Extending Operation of Autonomous Shipping
- 11:35h Liu, Li, Chen, Ma, Yan (Wuhan University of Technology)
An Integration Platform for Autonomous and Remote-Control Ships
- 12:00h Daehlen, Berge (Sintef Ocean)
Prediction of Vessel Domain and Safe Areas for Navigation Based on Machine Learning
- 12:30h Lunch** - Ravioli al limone with panna e menta fresca
Crema caramel

Session: AI am Sailing – Chair: Kil

- 13:45h Taniguchi, Ichinose (NMRI)
Hull Form Design Support Tool Based on Machine Learning
- 14:10h Rafice, Van-Someren (Austal)
Improving Efficiency and Comfort of High Speed Craft using Machine Learning and Big Data
- 14:35h Rahav (TotemPlus)
Big Data and AI: Real-Time Navigation, CBM and More
- 15:00h Jia, Rytter (Aalborg Univ), Reinhardt (Roskilde Univ), Billesø (DFDS)
Improving Eco-Efficiency and Digitalisation in Ro-Ro Shipping through Decision Support and Optimisation
- 15:25h Coffee Break**
- Session: I've Got a Thing about Training – Chair: Plowman**
- 15:55h Bertram, Plowman, Feiner (DNV GL)
Survey Simulator – A Virtual Reality Training Tool for Ship Surveys
- 16:20h Karaila, Arabzadeh (Valmet Automation)
Extended Reality Platform: Data-Driven Architecture
- 16:45h Procee, Borst, Van Paassen, Mulder (NHL)
Finalized Experiment on the Effect of using Augmented Reality in Navigation
- 17:10h Van der Ende, Van Asselt, Koelman (MIWB/NHL Stenden)
Measuring the Effectiveness of Simulator Training

19:00h Dinner

Antipasti: Mixed fried vegetable, Sott'oli, Bruschette al pomodoro e al tartufo
Tagliata con patate arrosto
Cheese platter
Coffee, water, Red/white wine IGT "Cavalier tranquillo"

Vegetarian alternative available if booked by 7.5.2020