

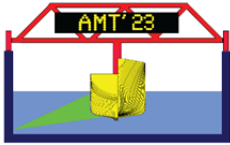
The 7<sup>th</sup> International Conference on  
Advanced Model Measurement Technology for the Maritime Industry (AMT'23)



## AMT'23 Conference Programme

24-26 October 2023, Istanbul, Turkey

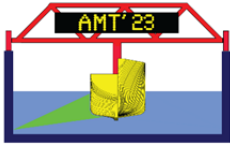
(Day 1) 24th of October 2023	
Time	Events & Locations
8:00-9:00	<b>Registry &amp; Coffee/Tea</b> (SDKM - Reception Hall)
9:00-9:15	<b>Opening Ceremony:</b> Welcome speeches Chair: TBC (SDKM - Conference Hall)
9:15-10:00	<b>KEYNOTE PRESENTATION - About the Importance of Ship Scale Trials for Maritime Research and Development</b> <i>Dr Dmitry Ponkratov, JoRES Project Coordinator, UK</i> Chair: TBC (SDKM - Conference Hall)
10:00-10:30	<b>Refreshments</b> (SDKM - Reception Hall)
10:30-11:45	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; text-align: center;"> <b>Session 1A - SMART WAVE MEASUREMENT TECHNOLOGIES</b> Chair: TBC (SDKM - Conference Hall) </div> <div style="width: 45%; text-align: center;"> <b>Session 1B - PIV TECHNOLOGY APPLICATIONS IN MODEL TESTS</b> Chair: TBC (SDKM - Senate Room) </div> </div>
10:30-10:55	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">           PAPER 22 - Highly resolving airborne ultrasonic 3D wave measurements with multiple fully synchronized controllers featuring a high number of sensors <i>Schümann, M. et al., General Acoustics, e.K, Kiel, Germany</i> </div> <div style="width: 45%;">           PAPER 20 - Non-intrusive pressure and load determination in a towing tank from PIV measurements on a hydrofoil <i>Jacobi, G., Delft University of Technology, The Netherlands</i> </div> </div>
10:55-11:20	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">           PAPER 1 - Measurement quality of airborne ultrasonic wave measurement technology <i>Tukker J. et al, MARIN, Wageningen, Netherlands</i> </div> <div style="width: 45%;">           PAPER 18 -The three-dimensional flows around tip-vortex cavities in the wake of a ship propeller <i>Perçin, O.B. et al., Middle East Technical Uni., Ankara, Turkey</i> </div> </div>



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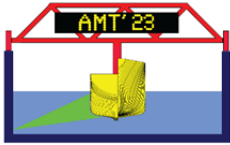
11:20-11:45	PAPER 14 - Three-Dimensional Measurement of Surface Disturbances in Kelvin Wake Using Stereo-vision Principle <i>Zhao, G. et al., The University of Strathclyde, Glasgow, UK</i>	PAPER 5 - On the applicability of the tomographic reconstruction technique for measurements of multiphase flows during sloshing model tests <i>Tödter, S. et al., University of Duisburg-Essen, Institute of Ship Technology, Germany</i>
11:45-13:15	<b>Lunch</b> (SDKM - Reception Hall)	
13:15-14:55	<b>Session 2A - UNDERWATER RADIATED NOISE - SMART MITIGATION AND MEASUREMENT TECHNOLOGIES</b> Chair: TBC (SDKM - Conference Hall)	<b>Session 2B - SPECIAL FLOW CHANNEL FACILITIES FOR DRAG AND MULTI-PHASE FLOW INVESTIGATIONS</b> Chair: TBC (SDKM - Senate Room)
13:15-13:40	PAPER 7 - Scale model measurements of ship machinery noise mitigation by air injection <i>Lloyd, T. et al., MARIN, Wageningen, The Netherlands.</i>	PAPER 12 - Performance evaluation of marine coatings in steady-state numerical simulations based on the experimental channel-flow setup <i>Midjiyawa, Z. et al., Jotun A/S, Sandefjord, Norway</i>
13:40-14:05	PAPER 25 - Measuring air bubble layer characteristics around the hull of a ship model <i>Klinkenberg, Y. et al., MARIN, Wageningen, The Netherlands</i>	PAPER 41 - An Experimental Method to Predict Drag Reduction Performance of Dimpled Plates in a Fully Turbulent Channel Flow <i>Ilter, K.Y. et al., Istanbul Technical University, Turkey.</i>
14:05-14:30	PAPER 36 - A Novel Underwater Radiated Noise Measurement Method Using a Waterproof Aerial Drone with Hydrophone: "HyDrone" <i>Fitzsimmons, P. et al., The University of Strathclyde, Glasgow, UK.</i>	PAPER 21 - The Multi-Phase Flow Tunnel of Delft University of Technology - design considerations and preliminary flow characterization <i>Fiscaletti, D. et al., Delft University of Technology, The Netherlands</i>
14:30-14:55	PAPER 8 - An experimental study on the dynamic flow of flooded water for a damaged ship in waves <i>Bowker, J et al., QinetiQ, Haslar Marine Technology Park, Gosport, UK.</i> "	PAPER 9 - Characterization of bubble layer lubrication mechanism by means of Bubble Image Velocimetry <i>Henry, P.-Y. et al., SINTEF Ocean, Trondheim, Norway</i>
14:55-15:30	<b>Refreshments</b> (SDKM - Reception Hall)	



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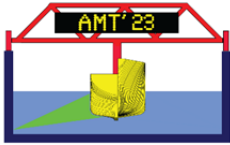
15:30-17:10	<b>Session 3A - UNCERTAINTIES IN MODEL AND FULL-SCALE TESTS</b> Chair: TBC (SDKM - Conference Hall)	<b>Session 3B - FURTHER PIV TECHNOLOGY APPLICATIONS &amp; MISCELLANEOUS MODEL TESTS USING SMART MATERIALS</b> Chair: TBC (SDKM - Senate Room)
15:30-15:55	PAPER 2 - Evaluating experimental and analysis uncertainty of resistance tests <i>van de Bunt, E. et al., MARIN, Wageningen, The Netherlands.</i>	PAPER 33 - Benchmarking SPIV Experiments <i>Attwell, H. et al., QinetiQ Haslar, Gosport, UK.</i>
15:55-16:20	PAPER 11 - Experimental study of impact on measurement uncertainty of forced oscillations of a NACA0012 hydrofoil using Particle Image Velocimetry <i>Krishnan, V et al., Delft University of Technology, The Netherlands</i>	PAPER 27- An Experimental Study towards the Applicability of Digital Image Correlation for Motion Analysis of Very Flexible Floating Structures <i>Pot, H. et al., Delft University of Technology, The Netherlands</i>
16:20-16:45	PAPER 30 - An Experimental Study on the Self-propulsion Characteristics of Fully Appended ONR Tumblehome with Uncertainty Analysis <i>Delen, C. et al., Istanbul Technical University, Turkey</i>	PAPER 19 - An experimental study on the loss of buoyancy at depth for closed cell uncoated and coated foam samples <i>Korkmaz, U. et al., QinetiQ, Haslar Marine Technology Park, Gosport, UK.</i>
16:45- 17:10	PAPER 53 - On the implosion of TITAN Submersible <i>Ozden, C., Istanbul Technical University, Turkey</i>	PAPER 29 - A 3D printed propeller's material properties impact on hydrodynamic performance <i>Turkmen, S. et al., Newcastle University, UK.</i>
17:15-19:30	<b>Reception with Canapes &amp; Soft drinks</b> (SDKM - Reception Hall) <b>To be followed by Piano Recital by Int'l State Artist Ms Gulsin Onay</b> (SDKM - Conference Hall)	
19:30	<b>END OF FIRST DAY</b>	



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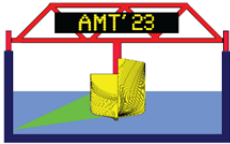
(Day 2) 25th of October 2023		
Time	Events & Location	
8:00-9:00	<b>Registry &amp; Coffee/Tea</b> (SDKM - Reception Hall)	
09:00-10:15	<b>Session 4A- SMART COMBINED FLOW VISUALISATION &amp; MEASUREMENT TECHNOLOGIES</b> Chair: TBC (SDKM - Conference Hall)	<b>Session 4B - H2020 GATERS PROJECT SESSION - I (Model tests &amp; Extrapolations)</b> Chair: TBC (SDKM - Senate Room)
09:00-09:25	PAPER 13 - Tracking of forward hull body vortex of a ship at drift angle in shallow water <i>Nataletti, M. et al., Norwegian University of Science and Technology, Trondheim, Norway</i>	PAPER 17 - Systematic experimental survey of propulsive and acoustic performances of a Gate Rudder® system in relation to a conventional rudder <i>Santic, I. et al, National Research Council (NCR-INM), Italy</i>
09:25-09:50	PAPER 24 - Computer Vision Approach for Detailed Characterization of Cavitation Structures <i>Franzosi, G. et al., University of Genoa, Italy</i>	PAPER 47 - On the Evaluation of the Model Test Extrapolation Methods by Sea Trial Measurements <i>Celik, C.et al., Istanbul Technical University, Turkey</i>
09:50-10:15	PAPER 45 - Experimental Investigation of Cavitating and Non-Cavitating Flow over NACA 0015 Hydrofoil <i>Abbasi, A.A. et al., University of Genoa, Italy.</i>	PAPER 40 - Design, Development and Validation of a New Free-Running Maneuvering Test System <i>Özden, C. et al., Istanbul Technical University, Turkey</i>
10:15-11:00	<b>Refreshments</b> (SDKM - Reception Hall)	
11:00-12:15	<b>Session 5A - FLOATING OFFSHORE STRUCTURES MODEL MEASUREMENT TECHNOLOGY &amp; ANALYSIS METHODS</b>	<b>Session 5B - H2020 GATERS PROJECT SESSION - II (Design and Operation Uncertainties)</b>



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	Chair: TBC (SDKM - Conference Hall)	Chair: TBC (SDKM - Senate Room)
11:00-11:25	PAPER 31 - Experimental investigation of the floatation stability of a scaled floating wind turbine in waves <i>Kang, K. et al., University of Duisburg-Essen, Institute of Ship Technology, Ocean Engineering and Transport Systems (ISMT), Germany</i>	PAPER 37 - Design accuracy and errors of Gate Rudder System of MV ERGE revealed by the GATERS Project Trials Observations <i>Sasaki, N. et al., The University of Strathclyde, Glasgow, UK.</i>
11:25-11:50	PAPER 4 - Towards boundary layer measurements under VLFS interacting with surface waves <i>Uksul, E. et al., Delft University of Technology, The Netherlands</i>	PAPER 52 - Full Scale Measurement Uncertainty for Comparative Tests <i>Insel, M. et al, Hidroteknik, Istanbul, Turkey</i>
11:50-12:15	PAPER 51 - Development of a fully coupled aero-elastic-hydrodynamic-mooring framework for a floating vertical axis wind turbine <i>Liu, K. et al., University of Shanghai for Science and Technology, Shanghai, P.R. China</i>	PAPER 35 - Maneuverability Improvement Investigation of A Costal Vessel Retrofitted With A Gate Rudder System Using Computational And Experimental Methods <i>Gurkan, A.Y. et al., The University of Strathclyde, Glasgow, UK.</i>
12:15-13:45	<b>Lunch</b> (SDKM - Conference Hall)	
13:45-15:00	<b>Session 6A - MISCELLANEOUS MANOEVRABILITY MODEL TESTS &amp; SUPPORTING TOOLS</b> Chair: TBC (SDKM - Conference Hall)	<b>Session 6B - H2020 GATERS PROJECT SESSION - III (Cavitation and Underwater Radiated Noise )</b> Chair: TBC (SDKM - Senate Room)
13:45-14:10	PAPER 6 - Captive Model Tests and 6-DoF Simulations of a BB2 Submarine near the Free Surface <i>Kim, D.J. et al., KRISO, Daejeon, Republic of Korea.</i>	PAPER 48 - Cavitation Observation of M/V ERGE During the Sea Trials: A Comparison of Gate Rudder and Conventional Rudder Configurations <i>Koksal, C. et al., The University of Strathclyde, Glasgow, UK</i>
14:10-14:35	PAPER 10 -A study on the free Running Model Test Method for BB2 Submarine <i>Cho, S. et al., KRISO, Daejeon, Republic of Korea.</i>	PAPER 46 - Effects of the Gate Rudder System (GRS) on the Experimental Cavitation Observations and Noise Measurements <i>Ozsayan, S. et al., Technical University of Istanbul, Turkey</i>
14:35-15:00	PAPER 16 - Spline based trajectory comparison techniques <i>Wens, L., CTech Metrology, Belgium</i>	PAPER 49 - Underwater Radiated Noise Measurements of Pre- and Post-Retrofit of Gate Rudder System During the Sea Trials <i>Koksal, C. et al., The University of Strathclyde, Glasgow, UK</i>
15:00-15:45	<b>Refreshments</b> (SDKM - Hall)	

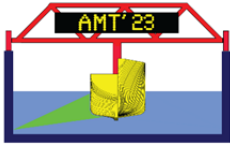


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15:45-17:25	<b>Session 7A - SMART FREE RUNNING SHIP MODEL TEST TECHNOLOGIES</b> Chair: TBC (SDKM - Conference Hall)	<b>Session 7B - H2020 GATERS PROJECT SESSION - IV (Gate Rudder Blade Design Engineering Aspects)</b> Chair: TBC (SDKM – Senate Room)
15:45-16:10	PAPER 23 - Data acquisition and autonomous control of free running ship models using video motion caption <i>Bowker, J. et al., University of Southampton, UK.</i>	PAPER 43 - On the Structural design of the rudder plate of Gate Rudder <i>Sasaki, N. et al., The University of Strathclyde, Glasgow, UK.</i>
16:10-16:35	PAPER 26 - Automation of maneuvering tests in a towing tank using real-world navigation technology <i>Roettig, F. et al, Development Centre for Ship Technology and Transport Systems (DST), Duisburg, Germany</i>	PAPER 44 - Gate Rudder System: investigation for the use of composite materials <i>Paboeuf, S. et al., Bureau Veritas Marine &amp; Offshore, Nantes, France</i>
16:35- 17:00	PAPER 38 - A free running instrumented container ship model for investigating energy efficiency while manoeuvring in waves <i>Bowker, J. et al., University of Southampton, UK.</i>	PAPER 34 - Computational Investigation of The Impact of a Gate Rudder System on A High Block Coefficient Coastal Vessel as A Retrofit <i>Gurkan, A.Y. et al., The University of Strathclyde, Glasgow, UK</i>
17:00- 17:25	PAPER 15 - A state-of-the-art free running system in the Towing Tank for Maneuvers in Shallow Water as part of the ASHIP framework <i>Zwijnsvoorde, Tv et al., Flanders Hydraulics, Antwerp, Belgium</i>	PAPER 50 - Measuring Oscillating Forces of a Gate Rudder Blade using Macro-Fibber Composite Actuator <i>Raftopoulos S. et al., Newcastle University, UK.</i>
18:00-22:00	<b>Conference dinner at PORTAXE Restaurant Balta Limani (Bosphorous)</b> (Buses to depart to Restaurant in front of SDKM)	
22:00	<b>END OF TECHNICAL PRESENTATIONS &amp; SECOND DAY</b>	

(Day 3) 26th of October 2023



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Time	Events & Location
09:30–10:00	<b>Coffee/Tea</b>  (The Faculty of Naval Architecture & Ocean Engineering Reception, ITU Maslak Campus)
10:00 -11:00	<b>GUIDED VISIT TO THE ISTANBUL TECHNICAL UNIVERSITY'S HYDRODYNAMIC TESTING FACILITIES</b>  (Meeting at the Faculty Reception Hall)
10:00-10:30	VISIT TO PROF ATA NUTKU TOWING TANK – Guided tour and demonstration
10:30-11:00	VISIT TO ITU-CAT Cavitation Tunnel – Guided tour and demonstration
11:00	<b>END OF THE CONFERENCE</b>