

FINAL PROGRAM

Sunday 10.09.2023

17.00 - 19:00 Int. Standing Committee members meeting-part I (The Marmara Pera Hotel)

19.00 – 22.00 Standing evening reception (The Marmara Pera Hotel)

Monday 11.09.2023

Workshop venue: Istanbul Technical University, Ayazağa Campus, Faculty of NAOE, Maslak

8.20 – 8.50 Registration

9.00 – 9.10 Opening speeches

9.10 – 10.50 Session 1: Viscous effect on ship stability

Chaired by Luis Perez-Rojas, Toru Katayama & Kevin Maki

- Towards the uncertainty quantification of a roll damping model (Shawn Aram, Kenneth M. Weems and Vadim Belenky)
- Effects of half breadth to draught ratio on pressure distribution on hull caused by bilge-keels (Toru Katayama and Naofumi Yoshida)
- Experimental investigation of wave excitation roll moment in irregular beam waves (Toru Katayama, Yusuke Yamamoto, Atsuo Maki, Kei Sugimoto)
- Experimental and numerical investigation of viscous effects on parametric roll motion (Hasan Islam Copuroglu, Emre Peşman, Hiroki Morota, Naofumi Yoshida, Yusuke Yamamoto and Toru Katayama)

10.50 – 11.20 Coffee break

11.20 – 12.50 Session 6: Stability and safety of special vessels

Chaired by Gabriele Bulian, Ning Ma & Igor Bačkalov

- The challenges of wind turbine installation jack-ups within the regulatory stability framework (René van den Heuvel)
- Stability of inland vessels in extremely low water levels (Milica Vidić, Nathalie Reinach and Igor Bačkalov)
- Vulnerability assessment of excessive acceleration of an offshore support vessel with moonpool (Fei Duan, Ning Ma, Qiqi Shi, Xiechong Gu and Yaohua Zhou)

12.50 – 13.40 Lunch

13.40 – 15.20 Session 4: Stochastic approach to intact stability assessment

Chaired by Vadim Belenky, Alexander B. Degtyarev & Atsuo Maki

- Recent results on wind and wave generation, stability of parametric rolling, methods of moment equation and maneuvering stability for ship dynamics in irregular seas (Atsuo Maki, Yuuki Maruyama, Masahiro Sakai and Leo Dostal)

- Longuet-higgins wave model and ARMA representations (Vladas Pipiras, Arthur Reed, Thermistoklis Sapsis, Kenneth Weems)
- Considerations for a free-running implementation of the critical wave groups method (Kevin M. Silva and Kevin J. Maki)
- Testing and benchmarking of direct counting methods (Cleve Wandji, Vladamir Shigunov and Vadim Belenky)

15.20 – 15.50 Coffee break

15.50 – 17.30 Session 5: Direct intact stability assessment

Chaired by Naoya Umeda & Claudio A. Rodríguez

- A unified mathematical model for direct stability assessments of surf-riding/broaching and pure loss of stability in stern quartering waves (Jiang Lu and Min Gu)
- Filling gaps in direct stability assessment procedures (Naoya Umeda, Yuki Maruyama, Soichiro Okamoto, Akihiro Oka, Shinya Masamoto and Akihiro Matsuda)
- Multifidelity fast code for direct stability assessment (Kenneth Weems, Vladas Pipiras and Vadim Belenky)
- Current ITTC work to support Direct Stability Assessment (V. Belenky, E. Boulougouris, S. Bu, T. Kim, J. Leguen, Y. Liu, A. Matsuda and C. Rodríguez)

17.30- 19.00 Int. Standing Committee members meeting-part II and Stability R&D Committee members meeting followed by Complimentary dinner for the members of the ISC and SRDC.

Tuesday 12.09.2023

9.00 – 10.40 Session 3: Operational aspects of intact stability

Chaired by William S. Peters, Marcos Míguez González & Alessandro Maccari

- Statistical approach of the most effective manoeuvre to undertake when parametric roll appears on a container ship in longitudinal seas (Vivien Luthy, François Grinnaert and Jean-Yves Billard)
- Development of an on-board system to monitor and estimate lateral accelerations (Gennaro Rosano, Ermina Begovic, Guido Boccadamo, Marcos Míguez González, Barbara Rinauro and Lucía Santiago Caamaño)
- An improved method for operational guidance in bimodal seas (Samuel J. Edwards, Michael Levine and Justin Harler)
- Errors induced by wind fluctuations during inclining test (Jean-François Leguen, Jean-Yves Billard and François Grinnaert)

10.40 – 11.10 Coffee break

11.10 – 12.40 Session 7: Safety of marine transportation and navigation

Chaired by Pierre Sames, Jan Otto de Kat & Hirotsada Hashimoto

- Navigating and manoeuvring of modern Wind Powered Ships – Status and Requirements from a legal and practical view (Michael Vahs, Sascha Strasser and Siegfried Wagner)
- Steering with wind propulsion (Anton Kisjes, Rogier Eggers and Antoine Bedos)

12.40 – 13.40 Lunch

13.40 – 15.40 Session 2: Damage stability

Chaired by Hendrik Bruhns, Dimitrios Konovessis and Pekka Ruponen

- Flooding Risk Assessment of Motor Bancas Operating in the Philippines (Dracos Vassalos, Donald Paterson, Francesco Mauro and Hongseok Bae)
- Ship Vulnerability Assessment by Forensic Investigation of Critical Damage Scenarios (Donald Paterson, Francesco Mauro and Dracos Vassalos)
- Ship Damage Stability Enhancement through Crashworthiness (Hongseok Bae, Dracos Vassalos, Donald Paterson and Francesco Mauro)
- An improved method for dynamic assessment of survivability of damaged ships in waves (Jianwen Duan, Ning Ma, Qiqi Shi, Xiechong Gu and Xin Li)
- Investigation on the capsizing probability of damaged ship in irregular seaway (Shu-xia Bu, Min Gu, Chen Yang and Pei-jie Zhang)

17.00 – 20.00 Boat tour, including provision for wine/beer service – Leaving from Istinye Sehir Hatları Port (near ITU Ayazağa Campus)

Wednesday 13.09.2023

9.00 – 10.30 Session 9: Locally organized session

Chaired by Metin Taylan & Ismail H.Helvacioglu

- Assessment of excessive acceleration of the IMO second generation intact stability criteria for the Offshore Supply Vessel (Erdem Üçer)
- Assessment of second-generation intact stability criteria and case study for a R-Ro ship (Hasan İ. Çopuroğlu, Emre Peşman and Metin Taylan)

10.30 – 11.00 Coffee break

11.00 – 12.40 Session 8: Future of stability and safety assessment

Chaired by Dracos Vassalos, Kostas J. Spyrou & Jean-François Leguen

- Quantification of modeling uncertainty of a reduced-order model as a validation problem (Vadim Belenky, Kenneth Weems, Vladas Pipiras and Themistoklis Sapsis)
- Damage stability of passenger ships: a multi-modal analysis of time to capsize (Francesco Mauro, Dracos Vassalos, Donald Paterson and Hongseok Bae)
- Identification of recurrence in irregular time-series (Dimitris Tsoumpelis and Kostas J. Spyrou)
- Real-time onboard flooding risk assessment for passenger ships for ship-to-ship collisions (Dracos Vassalos, Donald Paterson, Francesco Mauro and Hongseok Bae)

12.40 – 13.10 Closing session

VENUE ADDRESS:

Faculty of Naval Architecture and Ocean Engineering- İTÜ Ayazaga Campus, 34469, Maslak/Istanbul

(Faculty name in Turkish: Gemi İnşaatı ve Deniz Bilimleri Fakültesi) <https://gidb.itu.edu.tr/en/home>