

International Ship Stability Workshop

Belgrade · Serbia · 5-7 June 2017

Program

Sunday | June 4th

18:00 – 19:30 Registration
 19:30 – 21:00 Welcome reception | [Hotel Crowne Plaza](#)

Monday | June 5th

08:00 – 08:30 Registration
 08:30 – 09:00 Welcome and introduction
[Igor Bačkalov and Milorad Motok](#) | Local Organizing Committee
[Konstantinos Spyrou](#) | International Standing Committee
[Jean-Michel Chatelier](#) | Bureau Veritas, Inland Navigation Department
 09:00 – 11:00 Session 1 | Challenges in the development of the Second Generation Intact Stability Criteria
 11:00 – 11:30 Coffee break
 11:30 – 12:30 Session 2 | Onboard intact stability management using advanced technologies
 12:30 – 14:00 Lunch
 14:00 – 15:30 Session 3 | Operational aspects of damage stability
 15:30 – 16:00 Coffee break
 16:00 – 17:30 Session 4 | Stability of naval vessels
 19:00 – 20:30 Sightseeing tour by bus | [All participants except ISC and SRDC members](#)
 18:00 – 20:30 International Standing Committee meeting | Stability Research & Development Committee meeting | [Only ISC and SRDC members](#)

Tuesday | June 6th

08:30 – 10:30 Session 5 | Probabilistic computation in stability assessment
 10:30 – 11:00 Coffee break
 11:00 – 12:30 Session 6 | Stability and safety of inland and river-sea ships
 12:30 – 14:00 Lunch
 14:00 – 15:00 Session 7 | Issues of stability modeling
 16:00 – 19:00 River cruise on the Danube and Sava | [River Flotilla command ship Kozara](#)
 19:00 – 23:00 Official ISSW 2017 dinner | [Top of the Hub Restaurant & Lounge](#)

Wednesday | June 7th

08:30 – 10:30 Session 8 | Stability of fishing vessels
 10:30 – 11:00 Coffee break
 11:00 – 12:30 Session 9 | Stability of high-speed craft
 12:30 – 13:00 Closure
 13:00 – 14:00 Light lunch

Registration, welcome reception, sessions, coffee breaks and lunch breaks take place at the ISSW 2017 venue, Hotel Crowne Plaza.

Sessions

Monday | June 5th

- 09:00 – 11:00 **Session 1** | Challenges in the development of the Second Generation Intact Stability Criteria
Session chairs | William Peters and Konstantinos Spyrou
- On the consistency of the level 1 and 2 vulnerability criteria in the Second Generation Intact Stability
- [Markus Tompuri](#), [Pekka Ruponen](#) and [Daniel Lindroth](#)
- Sample applications of the Second Generation Intact Stability Criteria – robustness and consistency analysis
- [Carsten Schrøter](#), [Marie Lützen](#), [Henrik Erichsen](#), [Jørgen Juncher Jensen](#), [Hans Otto Kristensen](#), [Preben Hagelskjær Lauridsen](#), [Onur Tunccan](#) and [Jens Peter Baltersen](#)
- Challenges of Dead Ship condition vulnerability criteria development
- [William S. Peters](#) and [Vadim Belenky](#)
- Model experiment on pure loss of stability for a ship in astern waves and its relationship with the Second Generation Intact Stability Criteria
- [Naoya Umeda](#), [Mizuki Osugi](#), [Masahiro Sakai](#), [Akihiko Matsuda](#) and [Daisuke Terada](#)
- Possible simplifications of direct stability assessment
- [Vladimir Shigunov](#)
- 11:30 – 12:30 **Session 2** | Onboard intact stability management using advanced technologies
Session chairs | Naoya Umeda and Hirota Hashimoto
- A case study on operational limitations by means of navigation simulation
- [Hirota Hashimoto](#), [Yuuki Taniguchi](#) and [Michio Fujii](#)
- Acquisition and prediction of wave surface by marine radar for the safety of small ships
- [Hironori Susaki](#), [Yoshiaki Hirakawa](#), [Takehiko Takayama](#) and [Tsugukiyo Hirayama](#)
- On safe navigation support system using GPS compass
- [Daisuke Terada](#), [Masahiro Tamashima](#), [Ikuo Nakao](#) and [Akihiko Matsuda](#)
- 14:00 – 15:30 **Session 3** | Operational aspects of damage stability
Session chairs | Teemu Manderbacka and Hendrik Bruhns
- How to buy time following a flooding incident – intelligent quantification of emergency response measures
- [Kristian Bertheussen Karoliuss](#) and [Dracos Vassalos](#)
- Impact assessment of wave statistics on ship survivability
- [Donald Paterson](#), [Georgios Atzamos](#), [Dracos Vassalos](#) and [Evangelos Boulougouris](#)
- Implications of different alternatives for damage stability analysis in decision support
- [Petri Pennanen](#), [Teemu Manderbacka](#) and [Pekka Ruponen](#)
- 16:00 – 17:30 **Session 4** | Stability of naval vessels
Session chairs | Jean-François Leguen and Timothy C. Smith
- An integration of present navy ships intact stability criteria in the perspective of ship performance assessment in a seaway
- [Nicola Petacco](#), [Paola Gualeni](#), [Jean-Yves Billard](#) and [François Grinnaert](#)
- Iced maritime routes, impact on stability for naval ships
- [Paul Creismas](#), [Guillaume Lannel](#) and [Jean-François Leguen](#)
- Adverse health effects and reduced work ability due to vertical accelerations in high-performance marine craft personnel
- [Manudul Pahansen de Alwis](#) and [Karl Garne](#)

Sessions

Tuesday | June 6th

- 08:30 – 10:30 **Session 5** | Probabilistic computation in stability assessment
Session chairs | Vadim Belenky and Arthur M. Reed
- Linear seakeeping high sea state applicability
[Timothy C. Smith and Kevin M. Silva](#)
- Including diffraction and radiation into probabilistic description of capsizing
[Kenneth Weems and Vadim Belenky](#)
- Modeling broaching-to and capsizing with extreme value theory
[Vadim Belenky, Kenneth Weems, Kostas Spyrou, Vladas Pipiras and Themistocles Sapsis](#)
- Evaluation of the critical wave groups method for calculating the probability of extreme ship responses in beam seas
[Panayiotis A. Anastopoulos, Kostas J. Spyrou](#)
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- 11:00 – 12:30 **Session 6** | Stability and safety of inland and river-sea ships
Session chairs | Gabriele Bulian and Igor Bačkalov
- Practicalities of loading instruments for inland waterway tankers
[Herbert Koelman and Egbert van IJken](#)
- Stability and seakeeping of river-sea vessels: Classification rules
[Jean-Michel Chatelier, Wa Nzengu Nzengu and Raffaele Cocito](#)
- On application of standard methods for roll damping prediction to inland vessels
[Stefan Rudaković and Igor Bačkalov](#)
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- 14:00 – 15:00 **Session 7** | Issues of stability modeling
Session chairs | Vladimir Shigunov
- Verification and validation aspects of development and implementation of the Second Generation Intact Stability Criteria
[Arthur M. Reed](#)
- Study on vulnerability criteria for surf riding / broaching with a model experiment
[Min Gu, Jilong Chu, Yang Han and Jiang Lu](#)
- Study on standard mathematical model of pure loss of stability in stern-quartering waves
[Min Gu and Jiang Lu](#)

Sessions

Wednesday | June 7th

08:30 – 10:30

Session 8 | Stability of fishing vessels

Session chairs | Luis Pérez Rojas and Marcos Míguez González

A new era of fishing vessel safety emerges

[Georgios Atzampos](#), [Dracos Vassalos](#), [Evangelos Boulougouris](#) and [Donald Paterson](#)

The characteristics of capsizing phenomena of Japanese fishing vessels

[Akihiko Matsuda](#), [Daisuke Terada](#) and [Hirotada Hashimoto](#)

Contributions on roll damping coefficient for fishing vessels

[Adriana Oliva-Remola](#) and [Luis Pérez Rojas](#)

Use of the Wolfson stability guidance for appraising the operational stability of small fishing vessels

[Matteo Scarponi](#)

Towards real-time identification of initial stability from ship roll motion analysis

[Marcos Míguez González](#), [Gabriele Bulian](#), [Lucía Santiago Caamaño](#) and [Vicente Díaz Casás](#)

11:00 – 12:30

Session 9 | Stability of high-speed craft

Session chairs | Frans van Walree, Anders Rosén and Toru Katayama

A motion estimation method of high speed craft in irregular sea by using onboard monitoring motion time series data for motion control

[Daisuke Terada](#), [Ryosuke Amano](#) and [Toru Katayama](#)

High-speed craft dynamics in waves: challenges and opportunities related to the current safety philosophy

[Anders Rosén](#), [Ermina Begovic](#), [Mikael Razola](#) and [Karl Garne](#)

Validation of simulation tools for a RHIB operating in heavy seas

[Frans van Walree](#) and [William L. Thomas](#)