



上海交通大学  
SHANGHAI JIAO TONG UNIVERSITY



## IUTAM Symposium on Physics and Modeling of Slamming and Breaking Waves

November 15-18, Shanghai, China

### Technical Program

Venue: Academic Center, Shanghai Jiao Tong University, 800 Dongchuan Road, Shanghai, China

| November 15, Friday  |  |
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| 14:00-20:00  | Registration, Academic Center, Shanghai Jiao Tong University   |
| 18:30-20:30  | Reception, Academic Center, Shanghai Jiao Tong University  |
| November 16, Saturday  |  |
| VooV: <a href="https://meeting.tencent.com/dm/0mV8yfi8Mbm5">https://meeting.tencent.com/dm/0mV8yfi8Mbm5</a> Meeting ID: 278725076 PW: 801801 |  |
| Sessions I   |  |
| Chair: Nobuhito Mori   |  |
| 9:00-9:40  | <b>Slamming load effects on ships and marine structures</b><br>Odd Magnus Faltinsen<br><i>Norwegian University of Science and Technology</i>   |
| 9:40-10:20   | <b>Impact by a wave crest onto a circular cylinder</b><br>Alexander Korobkin<br><i>University of East Anglia</i>   |
| 10:20-10:40  | <b>Coffee Break</b>  |
| Sessions II  |  |
| Chair: Hermann Fritz   |  |
| 10:40-11:20  | <b>Impact of wave dissipation on upper ocean circulation</b><br>Nobuhito Mori<br><i>Kyoto University</i>   |
| 11:20-12:00  | <b>Turbulence characteristics of a resonant liquid sloshing flow</b><br>Pengzhi Lin<br><i>Sichuan University</i>   |
| 12:00-14:00  | <b>Lunch</b>   |
| Sessions III   |  |
| Chair: Hua Liu   |  |
| 14:00-14:40  | <b>Wave breaking and transport of cliff top boulders (<i>online presentation</i>)</b><br>Frederic Dias<br><i>University College Dublin &amp; ENS Paris-Saclay</i>  |
| 14:40-15:20  | <b>On some properties of the fluid dynamics in breaking wave (<i>online presentation</i>)</b><br>Yves-Marie Scolan<br><i>ENSTA Bretagne</i>  |
| 15:20-16:00  | <b>Climate adaptation of coastal structures by reducing wave loads with low-crested structures and artificial reefs (<i>online presentation</i>)</b><br>Marcel R.A. van Gent<br><i>Delft University of Technology and Deltares</i> |
| 16:00-16:20  | <b>Coffee Break</b>  |
| Sessions IV  |  |
| Chair: Pengzhi Lin   |  |
| 16:20-16:50  | <b>Solitary wave impacting on a suspended cylinder</b><br>Dezhi Ning<br><i>Dalian University of Technology</i>   |
| 16:50-17:20  | <b>Physics-informed neural networks in modeling multiphase and boundary layer flow</b><br>Yiwei Wang<br><i>Institute of Mechanics, CAS</i>   |
| 17:20-17:50  | <b>An overview of Kelvin ship waves</b><br>Hui Liang<br><i>Technology Centre for Offshore and Marine, Singapore (TCOMS)</i>  |
| 17:50-18:20  | <b>Impacts of rheological behavior on landslide motion and tsunami hazard</b><br>Zhiyuan Ren<br><i>Northwestern Polytechnical University</i>   |
| 18:30-20:00  | <b>Dinner</b>  |

**November 17, Sunday**VooV: <https://meeting.tencent.com/dm/v6TVhMUSHyLc> Meeting ID: 438412722 PW: 801801

Sessions V Chair: Odd Magnus Faltinsen

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| 9:00-9:40 | <b>Planing hull and flexible plate hydro-elastic slamming and multidisciplinary design optimization and KCS plunging breaking wave (<i>online presentation</i>)</b><br>Frederick Stern<br><i>The University of Iowa</i> |
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| 9:40-10:20 | <b>Large-scale laboratory measurements of water level, storm waves, and spray loading in hurricane wind conditions</b><br>Hermann M. Fritz<br><i>Georgia Institute of Technology</i> |
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| 10:20-10:40 | <b>Coffee Break</b> |
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Sessions VI Chair: Alexander Korobkin

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| 10:40-11:10 | <b>Experimental study on the dam-break induced surge impact on an inclined wall</b><br>Haijiang Liu<br><i>Zhejiang University</i> |
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| 11:10-11:40 | <b>Elastic impact onto a liquid surface: pressure at the impact and penetration stages</b><br>Tatyana Khabakhpasheva<br><i>University of East Anglia</i> |
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| 11:40-12:10 | <b>Characteristics of seaplane landing in wave condition</b><br>Zhaoxin Gong<br><i>Shanghai Jiao Tong University</i> |
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| 12:10-13:30 | <b>Lunch</b> |
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Sessions VII Chair: Dezhi Ning

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| 14:30-15:00 | <b>Extreme wave under gust wind and floating breakwater</b><br>Ye Li<br><i>Southern University of Science and Technology</i> |
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| 14:00-14:30 | <b>On the maximum wave heights of the near breaking irregular waves in shallow water</b><br>Zhiwen Cai<br><i>China Ship Scientific Research Center</i> |
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| 14:30-15:00 | <b>Multi degree slamming with cavity and separation effect</b><br>Shiyan Sun<br><i>Jiangsu University of Science and Technology</i> |
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| 15:00-15:30 | <b>Research on ship slamming load and whipping response in regular waves based on fluid-structure interaction</b><br>Haotuo Qu<br><i>China Ship Scientific Research Center</i> |
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| 15:30-16:00 | <b>Coffee Break</b> |
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Sessions VIII Chair: Ye Li

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| 16:00-16:30 | <b>Numerical investigation of mixed-phase turbulence induced by a set of plunging jets</b><br>Zixuan Yang<br><i>Institute of Mechanics, CAS</i> |
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| 16:30-17:00 | <b>Advancing the MLM slamming model: higher-order solutions and dimensional expansion exploration</b><br>Ling Liu<br><i>China Ship Scientific Research Center</i> |
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| 17:00-17:30 | <b>Wave characteristics and turbulent statistics in the wake of a transom stern</b><br>Xiaoyu Guo<br><i>Shanghai Jiao Tong University</i> |
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| 17:30-18:00 | <b>Experimental investigations on propagation of solitary waves on an inclined elliptical atoll</b><br>Gang Wang<br><i>Hohai University</i> |
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| 18:00-18:30 | <b>Binocular reconstruction of the 3-D surface elevation for breaking bow wave tests in towing tank</b><br>Qian Wang<br><i>Shanghai Jiao Tong University</i> |
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| 18:30-20:30 | <b>Dinner</b> |
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**November 18**

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| 9:00-13:00 | <b>Technical tour to Deepwater Harbor at Yangshan Island in Shanghai.</b> |
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