





TENTATIVE PROGRAMME

Date	Time	Schedule	Venue
9 th December	15:00-22:00 (Ice breaker: 17:00-19:00)	Registration	Haiji Hotel & Nanyang Hotel
	8:30-9:00	Opening ceremony	Hailan hall, Haiji Hotel
	9:00-9:40	Plenary speech	
	9:40-10:10	Group photograph & Tea break	
	10:10-11:50	Plenary speeches	
	12:00-13:30	Lunch	School canteen
		P1 Wave, tidal and wind energy	203, Teaching Building
		P2 Coastal and ocean structures, breakwaters, and revetments	224, Teaching
10 th December		P3 Coastal hydrodynamics and coastal processes	Building
	13:30-18:00	· · ·	220, Teaching Building
		S3 Evolution and modeling of the Yellow River Estuary	209, Teaching Building
		S4 Coastal Hazards and Integrated Management Options	226, Teaching Building
		S5 Marine geotechnics	201, Teaching Building
	18:00-20:00	Banquet	Haiji Hotel
11 th December		P2 Coastal and ocean structures, breakwaters, and revetments	224, Teaching Building
		P4 Estuary and coastal environment and eco-hydraulics	203, Teaching Building
	9:00-12:00	S1 Coastal reservoirs for SDG6	209, Teaching Building
	(Tea Break: 10:10-10:30)	S2 Marine aquaculture engineering	220, Teaching Building
		S4 Coastal hazards and integrated management options	226, Teaching Building
		S5 Marine geotechnics	201, Teaching Building







	12:00-13:30	Lunch	School canteen
	13:30-17:30	Technical tour	
	17:30-19:30	Dinner	School canteen
		P3 Coastal hydrodynamics and coastal processes	224, Teaching Building
12 th December		P5 Laboratory techniques and measurement systems	201, Teaching Building
	8:30-12:05	P6 Field measurement, floating bodies, wave generation and analysis	209, Teaching Building
	(Tea Break: 10:10-10:30)	P7 Sediment transport, erosion, and sedimentation	203, Teaching Building
		S2 Marine aquaculture engineering	220, Teaching Building
		S4 Coastal hazards and integrated management options	226, Teaching Building
	12:00-13:30	Lunch	School canteen
	14:20-16:20	Plenary speeches	Hailan hall, Haiji
	16:20-	Closing ceremony	Hotel







Opening ceremony & Plenary speechs

Thursday, 10 th December (Haiji Hotel)		
8:30-9:00	Opening ceremony: LOC Chair: Pengzhi Lin Prof. Joseph H.W. Lee, The president of IAHR Ruifei Wang, Zhejiang University	
9:00-9:40 On-site	Plenary speech: Foundation behavior of offshore wind turbine Lizhong Wang (Zhejiang University)	
9:40-10:10	Group photograph & Tea break	
	Chair: Dezhi Ning	
10:10-10:50 Online	Plenary speech: Swash flows generated by bores with variable length Philip LF. Liu (National University of Singapore)	
10:50-11:30 Online	Plenary speech: Surface wave breaking in the laboratory and field: A review of the history and recent progress in predicting its onset and strength James T. Kirby (University of Delaware)	
11:30-12:10 Online	Plenary speech: An extended Stokes solution for turbulent wave boundary layers Liang Cheng (The University of Western Australia)	
12:10-13:30	Lunch	







P1 Wave, tidal and wind energy

TEL 1 40th D 1 (202 T 11 D 11 11)			
	Thursday, 10 th December (203, Teaching Building)		
	Chair:		
13:30-13:55	Orientation of the wave and tidal energies, from basic research to commercial application		
On-site keynote	Hongda Shi (Ocean University of China)		
13:55-14:10	Mechanical metamaterials piezoelectric nanogenerator (MM-PENG)		
On-site	Pengcheng Jiao (Zhejiang University)		
14:10-14:25	Experimental study of the hydrodynamic effects of tidal turbines in staggered array		
On-site	Yaling Chen (Lanzhou University)		
14:25-14:40	Synthetic mooring ropes for renewable energy applications		
On-site	Yushun Lian (Hohai University)		
14:40-14:55 On-site	Analysis on the power fluctuation of tidal stream turbine in the turbulence flow combined with regular waves Yuquan Zhang (Hohai University)		
14:55-15:10	An effective framework for wake predictions of tidal-current turbines		
On-site	Chen Long (Changsha University of Science & Technology)		
15:10-15:25 Online	Development of coupling program and dynamic response of articulated offshore wind turbine Pei Zhang (Tianjin University)		
15:25-15:45	Tea break		
	Chair:		
15:45-16:10 Online keynote	A bottom-sitting wave energy converter: characteristics of local flow field and scour Zhenhua Huang (University of Hawaii at Manoa)		
16:10-16:25 On-site	Hydrodynamic performance of WECs embedded in a breakwater Yang Zhang (Harbin Engineering University)		
16:25-16:40 On-site	Wave energy focusing due to three-dimensional bragg resonance with undulating bottom of V-shaped layout Haiming Zhang (Hohai University)		
16:40-16:55 On-site	Energy Properties for Higher-order Stokes Waves over Horizontal Bottom Xiang Gao (Dalian University of Technology)		
16:55-17:10 On-site	Numerical simulation of an offshore single-chamber heave-only oscillating water column device Pinjie Wang (Zhejiang University)		
17:10-17:25 Online	Experimental development of a hybrid wave energy converter for rubble mound breakwaters Paulo Rosa Santos (Faculty of Engineering of the University of Porto)		
17:25-17:40 On-site	Design and Optimization of a Hybrid System of Wave Energy converters and Floating Breakwaters Binzhen, Zhou (South China University of Technology)		
18:00-19:30	Banquet		







P2 Coastal and ocean structures, breakwaters, and revetments

Thursday, 10 th December (224, Teaching Building)			
	Chair:		
13:30-13:55 Online keynote	Towards development of entirely Lagrangian meshfree computational methods for hydroelastic fluid-structure interactions in coastal engineering Abbas Khayyer (Kyoto University)		
13:55-14:10 On-site	Study on hydrodynamics of ecologically vegetated honeycomb-type revetment under waves Jinfeng Zhang (Tianjin University)		
14:10-14:25 On-site	Hydrodynamic behavior of net cage in the open sea TiaoJian Xu (Dalian University of Technology)		
14:25-14:40 On-site	Experiment on vortex-induced vibration response of submarine flexible pipeline near seabed Hongjun Zhu (Southwest Petroleum University)		
14:40-14:55 On-site	Study on interaction between wave and dense-row pile breakwater Yifeng Zhang (Tianjin Research Institute for Water Transport Engineering)		
14:55-15:10 On-site	Experimental study on local scour around a subsea porous cubic caisson in steady current Fan Yang (Dalian University of Technology)		
15:10-15:25 Online	Tests on reversed open filters on sand-covered rock mounds Bas Hofland (Delft University of Technology)		
15:25-15:45	Tea break		







P3 Coastal hydrodynamics and coastal processes

Thursday, 10 th December (224, Teaching Building)			
	Chair:		
15:45-16:10	Some Advances in Modeling Tropical-Cyclone Induced Coastal Disasters		
On-site keynote	Xiping Yu (Tsinghua University)		
16:10-16:35	Necessity of using a wave friction factor in tsunami numerical simulation		
Online keynote	Hitoshi Tanaka (Tohoku University)		
16:35-17:00	Research Development of China Numerical Tank		
Online keynote	Wenyang Duan (Harbin Engineering University)		
17:00-17:15	How precise can we conduct the laboratory experiments?		
On-site	Haijiang Liu (Zhejiang University)		
17:15-17:30	Evolution of Infragravity Waves Over a Shoal Under Nonbreaking Conditions		
On-site	Ye Liu (Tianjin University)		
17:30-17:45	Study on wave attenuation in following and opposing currents due to rigid vegetation		
On-site	Chuyan Zhao (Dalian University of Technology)		
17:45 -18:00	Discussion of instability analysis for triad resonance among free surface waves, ambient		
17:45 -18:00 On-site	currents and rippled bottoms		
Oii-site	Jun Fan (Hohai University)		
18:00-19:30	Banquet		







S2 Marine aquaculture engineering

Thursday, 10 th December (220, Teaching Building)		
Chair: Fukun Gui		
13:30-14:00	Migration of aquaculture facility system to offshore	
On-site keynote	Jun Yan (Zhan jiang wan Laboratory)	
14:00-14:20	Aquaculture facility and intelligent associated equipment	
On-site	Fuxiang Liu (CIMC Marine Fishery Co., Ltd.)	
14:20-14:40	Design and application of distributed-type net cage	
On-site	Zhenlin Liang (Shandong University)	
14:40-15:00	Design and application of offshore aquaculture ship	
On-site	Zhixin Chen (Fishery machinery and Instrument Research Institute)	
15:00-15:20	Design and application of offshore aquaculture facility	
On-site	Yongfei Peng (Aqualis Offshore Marine Services (Shanghai))	
15:20-15:40	Tea break	
	Chair: Nils Goseberg	
15:40-16:10 On-site	Fluid-structure interactions of cage based aquaculture: from structures to organisms Yunpeng Zhao (Dalian University of Technology)	
16:10-16:30 On-site	Numerical study on scattering waves around a porous horizontal elliptic plate using reef3d Fenfang Zhao (China Ocean University)	
16:30-16:50 On-site	Effects of hydroid-fouling on the hydrodynamics of the fish cage netting Chunwei Bi (Dalian University of Technology)	
16:50-17:10	Effect of design configuration on structural response of longline aquaculture in waves	
On-site	Dejun Feng (National Engineering Research Center for Marine Aquaculture)	
17:10-17:30 Online	Dynamics of fish cages with elastic net in current and waves Gianluca Zitti (Università politecnica delle marche)	
17:30-17:50 Online	Large-scale laboratory experiments on mussel dropper lines Rebekka Gieschen (Leichtweiß-Institute for Hydraulic Engineering and Water Resources)	
18:00-19:30	Banquet	







S3 Evolution and modeling of the Yellow River Estuary

Thursday, 10 th December (209, Teaching Building)		
Chair: Shunqi Pan, Yuanfeng Zhang		
13:30-13:55	Study on the Morphological Processes Leading to Estuarine Channel Avulsion	
On-site keynote	Wanzhan Wang (Yellow River Institute of Hydraulic Research)	
13:55-14:10	Sediment Transport During Regulation Season of Water and Sediment in the Lower Yellow	
On-site	River	
On-site	Yuanfeng Zhang (Yellow River Institute of Hydraulic Research)	
14:10-14:25	Geomorphological Response of the Yellow River (Huanghe) Mouth to the Changes in its	
On-site	Boundary Conditions	
On-site	Naishuang Bi (Ocean University of China)	
14:25-14:40	Evolution of Coast Erosion and the Formed Land Area of the Yellow River Estuary	
On-site	Shoubing Yu (Yellow River Institute of Hydraulic Research)	
14::40-14:55	Simulating the Morphological Evolution of Deltaic Lobes in the Yellow River Estuary	
On-site	Lehong Zhu (Zhejiang University)	
14:55-15:10	The Yellow River Delta in Transition: Insights from Long-term Morphological Evolution	
On-site	Yutao Fu (East China Normal University)	
15:10-15:25	Extensions of the Yellow River plume under the impact of reservoir operation in Spring	
On-site	Yaoshen Fan (Yellow River Institute of Hydraulic Research)	
15:25-15:45	Tea break	
	Chair: Shunqi Pan, Yuanfeng Zhang	
15:45-16:10	Evolution of the Yellow River Delta under Changing Environment - from Numerical	
Online keynote	Modelling Perspectives	
Online Reynote	Shunqi Pan (Cardiff University)	
16:10-16:25	Hydrodynamics and Sedimentary Processes of a Turbid Estuary under the Changing	
On-site	Environment	
Oil-site	Hongyu Ji (East China Normal University)	
16:25-16:40 On-site	Historical changes of tidal and sediment dynamics due to coastline changes in Hangzhou	
	Bay since Tang Dynasty	
	Yueying Zha (Zhejiang University)	
16:40-16:55	Application of 3D laser scanning technology in the physical model of the Yellow River	
On-site	Estuary	
OH-SILL	Xiang Zhao (China Institute of Water Resources and Hydropower Research)	
18:00-19:30	Banquet	







S4 Coastal hazards and integrated management options

Thursday, 10 th December (226, Teaching Building)		
Chair: Zaijin You, Peter Nielsen		
13:30-13:55	Flood over China in summer of 2020: A Perspective from Three Oceans	
Online keynote	Chunzai Wang (South China Sea Institute of Oceanology)	
13:55-14:10	Wave overtopping mitigation by a porous layer on a rock slope	
On-site	Weidong Chen (Dalian University of Technology)	
14:10-14:25	An experimental study on flow kinematic characteristics of dam-break flow	
On-site	Ting Tan (Dalian University of Technology)	
14:25-14:40 On-site	Numerical modelling the typhoon waves and storm surges in the Bohai Sea and the North Yellow Sea	
	Mingliang Zhang (Dalian Ocean University)	
14:40-14:55	The role of simplified storms in sand wave formation: a numerical modeling study	
On-site	Zhenlu Wang (Ocean University of China)	
14:55-15:10	Hydrogeological characterization of coastal aquifers and borefield optimization	
Online	Ye Ma (Dalian Maritime University)	
15:10-15:25	Performance of geotextile sandbags revetment: in-situ coastal experimental station	
On-site	Yongqing Li (Dalian University of Technology)	
15:25-15:45	Tea break	
	Chair: Chun-zai Wang,	
15:45-16:10	Storm-induced coastal hazards and their impacts on the coast of China	
On-site keynote	Zaijin You (Dalian Maritime University)	
16:10-16:25	Practice and exploration of Chinese living shorelines	
On-site	Aifeng Tao (Hohai University)	
16:25-16:40	Novel approaches to predicting the water levels in mega-estuaries	
Online	Min Gan (Hohai University)	
16:40-16:55	An ISPH model for simulating sediment transport and turbulence under breaking waves	
On-site	Dong Wang (Dalian Maritime University)	
16:55-17:10	A computationally efficient subgrid model for coupled surface and groundwater flows	
On-site	Yujie Chen (Ocean University of China)	
17:10-17:25	Observation of wave overwash on an artificial beach	
On-site	Zhubin Cao (Hohai University)	
18:00-19:30	Banquet	







S5 Marine geotechnics

Thursday, 10 th December (201, Teaching Building)			
	Chair: L.Z. Wang & B. Zhu		
14:20-14:40 Online keynote	Porous models for fluid-seabed-structure interaction with OpenFOAM: Model validations and applications D.S. Jeng (Griffith University)		
14:40-15:00 Online keynote	Numerical modelling of cyclic horisontal loading of piles in sand and clay using hypoplasticity D. Masin (Charles University)		
15:00-15:20 Online keynote	Offshore caisson foundation in sand: from numerical modelling to macroelement design tool Z.Y. Yin (The Hong Kong Polytechnic University)		
15:20-15:40	Tea break		
	Chair: F.Y. Liang & J.H. Li		
15:40-16:00 On-site keynote	Characterization of spatial and temporal distributions of wave-induced pore pressure in a non-cohesive seabed F.P. Gao (Institute of Mechanics, Chinese Academy of Sciences)		
16:00-16:20 On-site keynote	Improved prediction of spudcan penetration resistance by an observation-optimized model D. Wang (Ocean University of China)		
16:20-16:40 On-site keynote	An anisotropy state-dependent gassy sand model with its application to submarine landslide modelling Y. Hong (Zhejiang University)		
16:40-17:00 On-site keynote	Developments of cavity expansion solutions and their applications to offshore geotechnical engineering P.Q. Mo (Chinese University of Mining and Technology)		
18:00-19:30	Banquet		







P2 Coastal and ocean structures, breakwaters, and revetments

Friday, 11 th December (224, Teaching Building)			
	Chair:		
9:00-9:25 On-site keynote	Performance analysis of perforated caisson structures under water wave action Yong Liu (Ocean University of China)		
9:25-9:40 On-site	Sartphone-Enabled Structural Health Monitoring Using Magnetic Field Intensity Ali Matin Nazar (Zhejiang University)		
9:40-9:55 On-site	Numerical simulation of chloride ion diffusion in concrete based on stochastic convex polygon coarse aggregate model Zhen Liu (Tianjin University)		
9:55-10:10 On-site	Stability analysis of seabed structures in macro-tidal turbid sea waters Zixuan Li (Zhejiang University)		
10:10-10:30	Tea break		
	Chair:		
10:30-10:55 Online keynote	A Simplified Physically-Based Model of Coastal Dike and Barrier Breaching Weiming Wu (Clarkson University)		
10:55-11:10 On-site	Numerical simulations for body hydrodynamic responses within uneven seabed conditions Aichun Feng (Shanghai Jiao Tong University)		
11:10-11:25 On-site	Experimental study of solitary waves propagating over a suspended plate Xuyang Niu (Dalian University of Technology)		
11:25-11:40 Online	Effectiveness of dummy water levels in physical models to optimize the toe and the crest levels D. P. L. Ranasinghe (Lanka Hydraulic Institute Ltd.)		
12:00-13:30	Lunch break		







P4 Estuary and coastal environment and eco-hydraulics

Friday, 11 th December (203, Teaching Building)		
Chair:		
9:00-9:25 On-site keynote	A new in-situ annular flume for measurements of the erosion threshold on intertidal flats Zheng Gong (Hohai University)	
9:25-9:40 On-site	Numerical study of porous material layer effects on mitigating sloshing Mi-An Xue (Hohai University)	
9:40-9:55 On-site	Effect of submerged and rigid artificial vegetation distributions on curved channel flow Yu Yang (Zhejiang University)	
9:55-10:10 Online	Integrated Coastal Zone Management: A Global Overview K.Thiruvenkatasamy (To be determined)	
10:10-10:30	Tea break	
	Chair:	
10:30-10:55 Online keynote	Experimental testing of ecosystem-flow interactions Ryan Lowe (The University of Western Australia)	
10:55-11:20 Online keynote	Numerical detection of natural CO ₂ seepage in coastal area using adjoint method Toru Sato (The University of Tokyo)	
11:20-11:35 On-site	Flow characteristics around the reef surf zone under the combined effects of wave and c urrent Yu Yao (Changsha University of Science and Technology)	
11:35-11:50 Online	Measuring hydrodynamics in aquatic vegetation canopies: Challenges and opportunities Arnold Van Rooijen (University of Western Australia)	
11:50-12:05 Online	Experimental and numerical investigation of wave attenuation by flexible vegetation Kai Yin (Southeast University)	
12:00-13:00	Lunch break	







S1 Coastal reservoirs for SDG6

Friday, 11 th December (209, Teaching Building)		
	Chair: Guangqiu Jin,Ji Chen	
9:00-9:25	How to design a coastal reservoir?	
Online keynote	Shuqing Yang (University of Wollongong)	
9:25-9:40 On-site	Two-Phase Risk Hedging Rules for Informing Conservation of Flood Resources in Reservoir Operation Considering Inflow Forecast Uncertainty Bin Xu (Hohai University)	
9:40-9:55	Simulation of dam-break flow through porous media by wc-mps mesh-free method	
On-site	Tibing Xu (Ningbo University)	
9:55-10:10 Online	The Opportunities and Challenges of Coastal Reservoir Strategy for Sustainable Water Resources Devel Honnasiddaiah Ramesh (National Institute of Technology Karnataka)	
10:10-10:30	Tea break	
	Chair: Shuqing Yang, Tibing Xu	
10:30-10:55 On-site keynote	Hydrological processes in the surrounding aquifer affact the salt dynamics in the coastal reservoir Guangqiu Jin (Hohai University)	
10:55-11:10 Online	A new perspective of acquiring water resources for coastal regions: utilization of atmospheric water resources Ji Chen (The University of Hong Kong)	
11:10-11:25 Online	Numerical Study of Brisbane River Estuary and Moreton Bay Khalil Usman (University of Wollongong)	
11:25-11:40	The influence of the dam/cut-off wall on seawater intrusion in coastal reservoirs	
On-site	Chaoqun Xu, Yuhang Tian, Jicong Xie (Hohai University)	
11:40-11:55	Hydro-environmental modelling of North Wales Tidal Lagoon using Telemac-2D	
Online	Bin Guo (Cardiff University,)	
11:55-12:10	Mechanism of sediment transport beneath the tidal wave and experimental verification	
Online	Muhammad Zain Bin Riaz (University of Wollongong)	
12:00-13:30	Lunch break	







S2 Marine aquaculture engineering

	Friday, 11 th December (220, Teaching Building)	
	Chair: Yunpeng Zhao	
9:00-9:30 On-site keynote	Offshore net enclosure engineering: from failure to success Fukun Gui (Zhejiang Ocean University)	
9:30-9:50 On-site	Design and application of energy supply system for offshore aquaculture Junhua Chen (College of Science & Technology Ningbo University)	
9:50-10:10 On-site	Construction of offshore net enclosure engineering Wei Song (East China Sea Fisheries Research Institute)	
10:10-10:30 On-site	Application of the Ultra High Molecular Weight Polyethylene Fibe (UHMWPE) for offshore aquaculture Ping Wei (Shandong Laiwei New Materials Co.,Ltd)	
10:30-10:50 On-site	Property and application of PET net Zhiyuan Zhang (Ningbo Hopenet Marine Technology Co.,Ltd)	
10:50-11:10 On-site	Property and application of high strong core spun PE net Guoyi Le (Zhoushan Lanjing New Materials Co.,Ltd)	
11:10-11:30 On-site	Design and safety analysis of fish farm for offshore aquaculture Xiaohua Huang (South China Sea Fisheries Research Institute)	
12:00-13:30	Lunch break	







S4 Coastal hazards and integrated management options

Friday, 11th December (226, Teaching Building)		
	Chair: Yuxiang Ma, Chi Zhang	
9:00-9:25 On-site keynote	Sediment transport over the muddy tidal flat: The influence of bio-physical processes and human activities Yaping Wang (East China Normal University)	
9:25-9:40 On-site	Modelling long-period wave impacts onto seashore areas induced by storm surge based on hybrid numerical model Ming Xiao (Ningbo University)	
9:40-9:55 On-site	Experimental Study of Clear-Water Scour for Submerged Piles in Steady Currents Shengtao Du (Ningbo University)	
9:55-10:10 On-site	Spatial and temporal characteristics of wave energy resources in Yellow and Bohai sea based on ERA5 Hongyuan Shi (Ludong University)	
10:10-10:30	Tea break	
	Chair: Ling Li, Aifeng Tao	
10:30-10:55 On-site keynote	Beach safety accidents in Chinese mainland coasts Chi Zhang (Hohai University)	
10:55-11:10 On-site	Laboratory Investigation of Beach Profile Evolution under Slowly Varying Storm Waves Jun Wang (Ocean University of China)	
11:10-11:25 Online	Human-induced changes on sedimentary environment in a macro-tidal estuary Zhixin Cheng (Dalian Maritime University)	
11:25-11:40 On-site	Real-time phase-resolved ocean wave forecast with data assimilation Guangyao Wang (Tianjin University)	
12:00-13:30	Lunch break	







S5 Marine geotechnics

Friday, 11 th December (201, Teaching Building)		
	Chair: F.P. Gao, D. Wang	
9:00-9:20 On-site keynote	Centrifuge modelling of lateral behaviour of tetrapod piled jacket foundations for offshore wind turbines B. Zhu (Zhejiang University)	
9:20-9:40 On-site keynote	Methods for predicting and monitoring the scour depth of underwater foundations X.G. Chen (Ocean University of China)	
9:40-10:00 On-site keynote	Effects of gas dissociation on mechanical behavior of a fine-grained sediments with carbonate shells C.F. Chiu (Shantou University)	
10:00-10:30	Tea break	
Chair: X.G. Chen & Z. Guo		
10:30-10:50	To be determined	
On-site keynote	F.Y. Liang (Tongji University)	
10:50-11:10	Physical modelling the failure mechanism of spatially variable soils	
On-site keynote	J.H. Li (Harbin Institute of Technology)	
11:10-11:30	The dynamic responses of offshore open-ended pile in sands	
On-site keynote	J.W. Liu (Qingdao University of Technology)	
12:00-13:30	Lunch Break	







P3 Coastal hydrodynamics and coastal processes

Saturday, 12 th December (224, Teaching Building)		
	Chair:	
8:30-8:55	Quasi-steady dam-break wave propagation on rough, horizontal beds	
Online keynote	Peter Nielsen (University of Queensland)	
8:55-9:10 On-site	Moving particle method in simulating hydrodynamics in ocean engineering Tibing Xu (Ningbo University)	
9:10-9:25 On-site	Experimental study on the interactions between counterflowing gravity currents Samuel Ukpong Okon (Zhejiang University)	
9:25-9:40 On-site	Stepwise alterations in tidal hydrodynamics in a highly human-modified estuary: the role of channel deepening and narrowing Ping Zhang (Sun Yat-sen University)	
9:40-9:55 On-site	Impacts of channel dredging on suspended sediment and siltation in the Jiaojiang Estuary Xueqian Chen (Zhejiang University)	
9:55-10:10 On-site	Resonance of long waves around a circular island and its relation to edge waves Zhengdong Yu (Tsinghua University)	
10:10-10:30	Tea break	
	Chair:	
10:30-10:45 Online	High-fidelity simulation of solitary wave propagation and evolution Yichen Huang (Shanghai Jiao Tong University)	
10:45-11:00 On-site	Physical modeling of regular wave induced horizontal circulation over a reef-lagoon-channel system Shubin Chen (Hohai University)	
11:00-11:15 On-site	Modeling the hydrodynamics changes by the construction of Yangshan Harbor, Shanghai, China Wenyun Guo (Shanghai Maritime University)	
11:15-11:30 On-site	Water surface response within a harbor to atmospheric disturbances moving along shoreline Qiuyi Sun (Tsinghua University)	
11:30-11:45 On-site	Asymmetric tidal dynamics in the marco-tidal Hangzhou Bay, China Yihan Ren (Zhejiang University)	
11 45 10 00	Propagation and turbulence characteristics of continuous-flux release gravity currents over rough beds	
11:45-12:00 On-site	Dongrui Han (Zhejiang University)	







P5 Laboratory techniques and measurement systems

Saturday, 12 th December (201, Teaching Building)	
	Chair:
8:30-8:55 Online keynote	Combined Energy Harvesting and Data Compression Approaches for Efficient Extreme Events Monitoring in Civil Infrastructure Nizar Lajnef (Michigan State University)
8:55-9:10 On-site	The properties of Rational function Wave Spectrum (RWS) and its application to island waves in the south china sea Yigeng Wang (Dalian University of Technology)
9:10-9:25 On-site	The contact measurement method of motion response for a constrained floating object under wave action Tengxiao Wang (Ningbo Institute of Technology, Zhejiang University)
9:25-9:40 On-site	Coupling Simulation of Waves and Storm Surges in a Wave-Current Flume Yanting Li (Nanjing Hydraulic Research Institute)
9:40-9:55 On-site	Experimental study on the three dimensional scour around marine pipelines Titi Sui (Hohai University)
9:55-10:10 On-site	Research on special shape wave maker technology Xin Jin (Beijing Sinfotek Technology Co., Ltd.)
10:10-10:25 Online	Flow measurements under aerated plunging and spilling breaking waves using particle image velocimetry Byoungjoon Na (Korea University)
12:00-13:30	Lunch break







P6 Field measurement, floating bodies, wave generation and analysis

Saturday, 12 th December (209, Teaching Building)		
	Chair:	
8:30-8:55 On-site keynote	Long-term Field Measurements of Beach-dune Dynamic Profiles on the Coast of Shandong Province, China Zaijin You (Dalian Maritime University)	
8:55-9: 10 Online	Harbour wave agitation analysis in the port of manta, ecuador William Jaen (To be determined)	
9:10-9:25 On-site	Freak wave impact on a floating platform in the small-air-gap condition Min Luo (Zhejiang University)	
9:25-9:40 On-site	Environmental Capacity Assessment in Sanmen Bay Jiahao Zhu (Zhejiang University)	
9:40-9:55 On-site	High-speed soft robots enabled by combustion for structural health monitoring in ocean engineering Haipeng Wang (Zhejiang University)	
9:55-10:10 Online	Mapping tidal currents at a tidal channel junction using fluvial acoustic tomography system Xiao Cong (Hiroshima University)	
10:10-10:30	Tea break	
	Chair:	
10:30-10:55 On-site keynote	Hydrodynamics of floating breakwaters (FBs) in near-reef sea areas Chunyan Ji (Jiangsu University of Science and Technology)	
10:55-11:10 Online	Extraction of higher harmonics in a focused wave group Xingya Feng (Southern University of Science and Technology)	
11:10-11:25 On-site	Two-layered liquid sloshing in a tank under vertical excitation Dongming Liu (Tianjin University)	
11:25-11:40 On-site	Internal Solitary Wave Breaking on Gaussian Ridge Junyang Yu (Zhejiang University)	
11:40-11:55 On-site	Impacts of Three Gorges Dam on the spatial-temporal water level dynamics in the Yangtze River estuary, China Huayang Cai (Sun Yat-sen University)	







P7 Sediment transport, erosion, and sedimentation

	Saturday, 12 th December (203, Teaching Building)	
	Chair:	
8:30-8:55	Development and application of a two-phase mixture model for sediment laden flows	
On-site keynote	Bingchen Liang (Ocean University of China)	
8:55-9:10	Unified theory of sediment transport threshold and rate across subaqueous bedload,	
On-site	windblown sand, and windblown snow	
On site	Thomas Pähtz (Zhejiang University)	
9:10-9:25	Floc size distributions of suspended cohesive sediments in estuarine and coastal waters	
On-site	Xiaoteng Shen (Hohai University)	
9:25-9:40	Boundary layer flow approximation for asymmetric oscillatory sheet flow	
On-site	Xin Chen (China Agricultural University)	
9:40-9:55	Rheology and its mechanism of clay sediment	
On-site	Yuan Lin (Zhejiang University)	
0.55 10.10	Mixing and propagating of weakly and strongly stratified two-layer lock-exchange gravity	
9:55-10:10	currents	
Online	Rui Zhu (Zhejiang University)/	
10:10-10:30	Tea break	
	Chair:	
10.20.10.45	Phosphorus transfer and transformation dynamics at sediment-water interface under	
10:30-10:45	propeller jet flow	
Online	Zhi Yu (Changsha University of Science and Technology)	
10:45-11:00	Influence of three-dimensional topography on different regions of density	
On-site	Jingyao Chen (Zhejiang University)	
11.00 11.15	A theoretical model for describing channel axis deviation and cross-section change under	
11:00-11:15	the action of cross flow in coastal region	
Online	Wang Na (Jiangsu ocean university)	
11:15-11:30	A logarithmic bottom boundary model for the unsteady and non-uniform swash	
On-site	Fangfang Zhu (University of Nottingham Ningbo China)	
11:30-11:45	Coastline change analysis along Quang Nam coast	
Online	Vu Huong Ngan (Thuyloi University)	
	Numerical simulation of hydrodynamic and sediment transport at Cua Lo Inlet, Quang	
11.45 12.00		
11:45-12:00	Nam Province, Vietnam	
11:45-12:00 Online	Nam Province, Vietnam Nguyen Quang Duc Anh (Thuyloi University)	







S2 Marine aquaculture engineering

	Saturday, 12 th December (220, Teaching Building)	
	Chair: Dejun Feng	
8:30-8:50 On-site	Dynamic response analysis of steel structure pen under the action of waves Yong Cui (Yellow Sea Fisheries Research Institute)	
8:50-9:10 On-site	Experimental study on hydrodynamic characteristics of fishing nets with different materials in waves and currents Changping Chen (Dalian Ocean University)	
9:10-9:30 On-site	Numerical simulation of the influence of the distances among artificial reefs on artificial reef flow effects Xinxin Wang (China Ocean University)	
9:30-9:50 On-site	Hydrodynamic aspects of a floating fish farm with circular collar Peng Li (Harbin Engineering University)	
9:50-10:10 On-site	Turbulence characteristics and mass transport in the near wake of fishing net panel Dongdong Shao (Beijing Normal University)	
10:10-10:30	Tea break	
	Chair: Yong Cui	
10:30-10:50 On-site	Submarine cable online observation system and its application in marine Ranch Yanzhen Gu (China Ocean University)	
10:50-11:10 On-site	Numerical simulation of hydrodynamic responses of a multi-body fish cage with single-point mooring system Chao Ma (Dalian University of Technology)	
11:10-11:30 On-site	Numerical study of the hydrodynamic characteristics of a semi-submersible aquaculture facility in waves Hangfei Liu (Dalian University of Technology)	
11:30-11:50 On-site	Numerical analysis of hydrodynamic loads on the structure of a marine fish cage Ziming Xu (Shanghai Jiao Tong University)	
12:00-13:30	Lunch break	







S4 Coastal hazards and integrated management options

Saturday, 12 th December (226, Teaching Building)	
Chair: Xiao-Hua Wang, Paul Liu	
8:30-9:55	Dynamic response of coasts and estuaries to human impacts
Online keynote	Xiaohua Wang (UNSW Canberra, Australia)
9:55-9:10	Alarming message from Asian major river deltas
Online	J. Paul Liu (North Carolina State University, USA)
9:10-9:25	Epidemic Mechanics: Three Theoretical Fundamental Epidemic Laws Based on Data of
9:10-9:25 Online	COVID-19 Pandemic
Onine	Junke Guo (University of Nebraska-Lincoln, USA)
9:25-9:40	Modelling near-shore processes using an unstructured-mesh model
Online	Yongsheng Wu (Bedford Institute of Oceanography, Dartmouth, Canada)
9:40-9:55	Stochastic Modeling of the Fate and Behaviours of Oil Spill in the Salish Sea
Online	Haibo Niu (Dalhousie University, Canada)
9:55-10:10	A modified expression of bottom friction factor beneath nonlinear nearshore waves
Online	Mingxiao Xie (Tianjin Research Institute for Water Transport Engineering)
10:10-10:30	Tea break
	Chair: Ya-ping Wang
10:30-10:55	Surface water and groundwater interactions in coastal wetlands
On-site keynote	Ling Li (Westlake University)
10.55 11.10	Numerical investigation of transformation and runup of solitary wave over permeable
10:55-11:10	fringing reef using a non-hydrostatic model
On-site	Ke Qu (Changsha University of Science & Technology)
11:10-11:25	Summer monsoon facilitated off-shelf transport of dissolved aluminum across the East
	China Sea
On-site	Zhaowei Wang (Dalian Maritime University)
11:25-11:40	Particle track modelling and observations to better understand complex sediment
Online	transport pathways, Darwin Harbour, Northern Territory, Australia
Unine	David Williams (inStream techniques, Darwin NT, Australia)
12:00-13:30	Lunch break







Plenary speeches & Closing ceremony

Saturday, 12 th December (Haiji Hotel)		
	Chair:	
14:20-15:00 Online	Plenary speech: Coastal Hydrodynamics of Coral Reefs and Islands Jinhai Zheng (Hohai University)	
15:00-15:40 Online	Plenary speech: Wave and current damping in mangroves Marcel Stive (Delft University of Technology)	
15:40-16:20 Online	Plenary speech: Development of the multi-float wave energy converter M4: experiments, linear modelling, mean forces and moorings Peter Stansby (University of Manchester)	
16:20-	Closing ceremony	