Start time	Monday July 14th, 2025		
	Salon A&B		**Pre Function Area**
7:00 AM	*Breakfast*		*Registration*
7:20 AM			
7:40 AM			
8:00 AM			
8:20 AM	*Opening Ceremony*		
	Salon C&D	**Garrison & Signal**	**Avalon**
	Session: (1A) Numerical Modelling of Ice Session Chair : Arttu Polojärvi	Session: (1B) Remote Sensing Session Chair : Pradeep Bobby	Session: (1C) Ice Management Session Chair : Freeman Ralph
8:40 AM	(8) **Perry Godse**, Shawn Kenny, Sam Vamplew and Bruce Devine. *"The Rideau Canal Skateway: An Assessment of Current Practice to Estimate Bearing Capacity through the Lens of a Changing Climate"*	(11) **Zahra Jafari**, Rocky Taylor and Pradeep Bobby *"Machine Learning-Based Detection of Icebergs in Sea Ice Using SAR Imagery"*	(140) **Sigurd Teigen**, Claire Bernard-Grand'Maison, Kenneth Eik, Vegard Hornnes and Richard Hall *"Ice risk management for the Johan Castberg FPSO in the Southern Barents Sea"*
9:00 AM	(24) **Lia Herrmannsdörfer** and Biye Yang *"Impact of environmental input on iceberg drift simulations for an exemplary trajectory in the Barents Sea"*	(122) **Peter McGuire**, Pradeep Bobby, Chris Boyce, Jeremy Hetzel and Qiu Hongyuan *"Automated Target Detection using RCM"*	(149) **Freeman Ralph**, Paul Stuckey, Jon Bruce, Pradeep Bobby, Mark Fuglem and Tony King *"Three Decades of Iceberg Management Supporting Grand Banks Operations"*
9:20 AM	(26) Malith Prasanna and Ilkka Perälä *"Discrete element method modeling of propeller blade profile ice impact experiments"*	(131) **Claire Bernard-Grand'Maison**, Sigurd H. Teigen, Richard Hall, Kenneth J. Eik, Vegard Hornnes, Jonathan Wighting, Svein I. Andersen and Hugo Isaksen *"Ice surveillance for Equinor's operations in the Southern Barents Sea"*	(98) **Li Zhou**, Jiaming Chen, Wenjun Lu, Runxin Xu and Shifeng Ding *"High-Resolution Simulation of Sea Ice Dynamics Using a Nested Modeling Approach"*
9:40 AM	*Refreshments Break*		
10:00 AM	*Keynote: "RareIce – addressing the challenges with ice where ice occurs rarely" by Sigurd Teigen*		
10:20 AM			
	Salon C&D	**Garrison & Signal**	**Avalon**
	Session: (2A) Numerical Modelling of Ice Session Chair : Jungyong Wang	Session: (2B) Offshore Wind & Renewable Energy Session Chair : Kevin Pope	Session: (2C) Clean Arctic Shipping & Ship Structures Session Chair : Bruce Quinton
10:20 AM	(46) **Haoyang Yin**, Yan Qu, Haidian Zhang and Shaowei Tang *"Numerical simulation of continuous brittle crushing ice load based on Weierstrass-Mandelbrot function"*	(13) **Arttu Polojärvi**, Malith Prasanna and Jan Åström *"Ice loads on wind turbines of a wind farm"*	(7) **Samaneh Sadeghi**, Bruce W.T. Quinton, Edward Moakler, Brian Veitch and Jennifer Smith *"Evaluating the Structural Response of Light Ice-Class Ships Under Ice Loads"*
11:00 AM	(51) Chaoge Yu, Yukui Tian, Weibo Wang, Xuhao Gang and Zhao *"Finite Element Modeling of Effects on ice loading from Collision of Ice Floes with rigid and elastic structures"*	(86) Mark Fuglem, Paul Stuckey, Ahmed Derradji-Aouat and Richard McKenna *"Review of Approaches for Modelling Sea Ice Loads on Offshore Wind Turbines"*	(12) **Oskar Veltheim** *"Error in strain gauge location affecting load estimation"*
11:20 AM	(67) **Alka Dash**, Ian Turnbull and Rocky Taylor *"An investigation of the relationship between statistical descriptions of ice conditions extracted from ice profiling sonar data versus sea ice charts"*	(36) **Alice Petry**, Otto Puolakka and Arttu Polojärvi *"Exploring ice-induced vibrations on compliant conical structures with ice basin experiments"*	(22) **Max Kelly**, Caleb Lethbridge, Joshua Veber, Thomas Browne and Brian Veitch *"Evaluating carbon emissions in Arctic search and rescue operations"*
11:40 AM	(71) **Igor Gribanov**, Takuji Waseda, Rocky Taylor and Ian Turnbull *"Application of the Material Point Method for Simulating Wind-Driven Sea Ice Breakup"*	(34) **Shaowei Tang**, Yan Qu, Haoyang Yin and Haidian Zhang *"Analysis of ice-induced vibration of a 15MW offshore monopile wind turbine under vertical continuous brittle crushing and conical bending crushing"*	(45) **Rob Hindley**, Ville Valtonen, Oskar Veltheim and Joakim Majander *"Improving the accuracy of ice load measurement systems"*
12:00 PM	*Lunch* *HERF INFO. Session*		
12:20 PM			
12:40 PM			
1:00 PM			
	Salon C&D	**Garrison & Signal**	**Avalon**
	Session: (3A) Numerical Modelling of Ice Session Chair : Jaakko Heinonen	Session: (3B) Offshore Wind & Renewable Energy Session Chair : Hayo Hendrikse	Session: (3C) Machine Learning & Artificial Intelligence Session Chair : Renat Yulmetov
1:20 PM	(89) **Jaakko Heinonen** and Knut V. Høyland *"Ridge keel surcharge effect during an interaction with a cylindrical offshore structure"*	(4) **Saroj Gautam**, Emmanuel Quayson-Sackey and Baafour Nyantekyi-Kwakye *"Assessing the predicting capabilities of three turbulence models for flow simulation around the tip section of NREL 5MW offshore wind turbine blade"*	(28) **Balsher Singh**, Joshua Barnes, Allison Kennedy, Matthew Hamilton and Samarasimha Reddy Chittamuru *"A Unified Data Platform for Maritime Analytics and Predictive Modeling in Arctic Operations"*
1:40 PM	(99) **Wenlong Li**, Li Zhou, Pentti Kujala, Shixiao Fu, Guangwei He, Feng Diao and Fang Li *"Parametric Analysis of Ship-Ice Dynamic Interaction Scenarios Based on FEM"*	(64) **Florian van der Stap**, Hayo Hendrikse and Martin Bjerre Nielsen *"Sheltering and interference effects for multi-leg offshore substation platforms interacting with sea ice"*	(37) **Elham Karimi**, Joshua Barnes, Dong Cheol Seo, Jungyong Wang and Lourdes Peña Castillo *"Predicting Icebreaker Resistance Using Machine Learning and Scale Model Testing"*
2:00 PM	(138) Tomasz Kolerski, Parisa Radan, Wojciech Artichowicz and Maciej Paprota *"Wind-Ice Interaction Under Variable Wind Velocities: Integration of Particle Image Velocimetry (PIV) and Particle Tracking Velocimetry (PTV)"*	(82) **Ramnina Betsarkes**, Kevin Pope and Yuri Muzychka *"Airflow Characterization of an NREL S809 Wind Turbine Blade with Particle Image Velocimetry"*	(54) **Matias Uusinoka**, Arttu Polojärvi and Jari Haapala *"Deep learning for automated surveillance of sea ice dynamics"*
2:20 PM		(147) **Baafour Nyantekyi-Kwakye**, Eugene Kankam and Emmanuel Quayson-Sackey *"Spatio-temporal analysis of flow around slip airfoils"*	(56) **Robert Norfleet**, Oskar Veggeland, Ekaterina Kim and Nabil Panchi *"Automatic Labelling for Supvervised Binary Segmentation of Sea Ice using Sparse Ground Truth Information"*
2:40 PM	*Refreshments Break*		
	Salon C&D	**Garrison & Signal**	**Avalon**
	Session: (4A) Marine Safety Session Chair : Brian Veitch	Session: (4B) Offshore Wind & Renewable Energy Session Chair : Paul Stuckey	Session: (4C) Machine Learning & Artificial Intelligence Session Chair : Ekaterina Kim
3:00 PM	(5) **Marijke de Rooij** *"Maritime Trends and Ice Risks in Svalbard: Challenges in a Changing Arctic"*	(90) **Paul Stuckey**, Ahmed Derradji-Aouat, Mark Fuglem and Ian Turnbull *"Evaluation of Monopile Wind Turbine Platforms for Extreme Design Conditions"*	(65) **Eunjin Oh**, Jungseok Ha and Seong-Yeob Jeong *"Multimodal Deep Learning Framework for Estimating Local Ice Loads on Polar Vessels"*
3:20 PM	(43) **Nataliya Marchenko** and Marijke Marloes de Rooij *"Shipping and Sea Ice in Svalbard Area. Last decade dynamics, regulations and risk"*	(95) **Tony King**, Paul Stuckey and Mark Fuglem *"Power Generating Potential on the Grand Banks Using Fixed-Bottom Wind Turbines"*	(111) **Charuka Amarappulige**, Eranga Fernando, Kevin Murrant, Syed Imtiaz, Salim Ahmed, Mohammed Islam and Hasanat Zaman *"Enhancing Nonlinear Model Predictive Controller for Autonomous Surface Vessels Using Reinforcement Learning: A Trajectory Tracking Study"*

3:40 PM	(101) **Leila Moradiavargani**, Rebecca Thistle, Jennifer Smith and Brian Veitch *"Assessing the Effectiveness of an Adaptive Instructional System in Simulator-Based Ice Management Training"*	(100) **Saroj Gautam**, Kevin Pope and Baafour Nyantekyi-Kwakye *"Dynamic analysis of six-degrees-of-freedom motion in wave energy converters"*	
4:00 PM	(119) **Akihisa Konno**, Mitsuki Saito, Motomu Oyama and Takatoshi Matsuzawa *"Preliminary Analysis of Parameter Effects on Oil Spill Simulations in Ice-Covered Waters"*	(107) **Shuvas Khanal**, Asif Patel, Krutarth Parmar and Kevin Pope *"Clean Hydrogen Production from Onshore and Offshore Wind Turbines Supplemented with Partial Electric Grid Power"*	

Tuesday July 15th, 2025

Start time	Salon A&B		Pre Function Area
7:00 AM			
7:20 AM		Breakfast	
7:40 AM			
8:00 AM			Registeration
8:20 AM	Opening		

	Salon C&D	Garrison & Signal	Avalon
	Session: (5A) Ice Mechanics Session Chair : Knut Hoyland	Session: (5B) Ship Performance in Ice Session Chair : Dan Oldford	Session: (5C) Ship Navigation in Ice Session Chair : David Molyneux
8:40 AM	(6) **Max Wolf** "A Small Ice Towing Tank for Conceptual Modeling. Part 1: Experimental Setup"	(16) Keisuke Anzai, Shigeya Mizuno and Yutaka Yamauchi "Evaluation method for the validity of pre-sawn level ice test using image analysis"	(20) **Rebecca Thistle**, Jennifer Smith and Brian Veitch "User-centred Analysis to Inform the Development of Ice Navigation Decision Support Technologies"
9:00 AM	(150) **Max Wolf** "A Small Ice Towing Tank for Conceptual Modeling. Part 2: Experimental Results"	(18) **Pirjo Määttänen** and Aki Kinnunen "Ice load measurements of high ice class azimuthing propulsion units"	(53) **Md Ashiqul Alam Khan**, Roger Skjetne and Ekaterina Kim "Traversability Analysis and Multivariate Optimal Path Planning in Dynamic Ice Fields"
9:20 AM	(35) Sid Oksala, Jukka Tuhkuri and Pauli Lehto "A Practical Method to Establish the Apparent Fracture Toughness of Ice in the Field"	(21) **Franz von Bock Und Polach**, Ihsan Kaplan, Jan Kubiczek and Christian Haas "Ice Trails with "Le Commandant Charcot" for Load Assessment"	(57) **Liangliang Lu**, Osiris Valdez Banda, Jon-Arve Røyset and Jakub Montewka "An Investigation of POLARIS in the Ice-infested Northern Baltic Sea"
9:40 AM	(143) **Kurtis Galway** and Rocky Taylor "Real-Time Observations of Microstructural Evolution in Compressed Ice"	(27) **Lina Sapp** and Franz von Bock Und Polach "Parameter-Based Generation of Ice Floe Fields"	(62) **Richard R.J. Duan**, K. Andrea Scott, Corwin G.J. MacMillan, Robert M. Gash and Zhao Pan "A Sensor Fusion Platform for Semantic Segmentation of Sea Ice Imagery"
10:00 AM	Refreshments Break		

	Salon C&D	Garrison & Signal	Avalon
	Session: (6A) Ice Mechanics Session Chair : Aleksey Marchenko	Session: (6B) Ship Performance in Ice Session Chair : Brendon Nickerson	Session: (6C) Ship Navigation in Ice Session Chair : Franz von Bock und Polach
10:20 AM	(39) **Knut Hoyland** and Aleksey Marchenko "Modelling of thermo-hydrodynamic processes in sea ice ridges"	(44) **Junji Sawamura**, Akihisa Konno and Taiki Tokudome "Experimental study on the ice resistance in ship, ice and regular wave interaction"	(76) **Boyang Jiao**, Fang Li, Pentti Kujala, Li Zhou, Guangwei He, Shixiao Fu and Shifeng Ding "Study on extreme Ice Force of Polar Vessels based on a Probabilistic Method"
10:40 AM	(79) **Sthéfano Lande Andrade**, Robert Gagnon and Bruce Quinton "A follow-up on the second set of ice impact experiments with the Large Double Pendulum Apparatus"	(52) **Mikko Suominenm**, Cong Liu, Ameer Arif, Pentti Kujala and Mashrura Musharraf "A probabilistic model for estimating ship performance in ice conditions"	(78) **Marius Seidl**, Bruce W. T. Quinton, Kevin Murrant and Andrew Vardy "A Hydrodynamics-Enabled Collision Model for Floating Objects"
11:00 AM	(38) **Aleksey Marchenko** and Alexey Tanurkov "Field experiment on long-term concentrated loading of floating sea ice"	(66) **Seong-Yeob Jeong**, Eun-Jin Oh and Hyun-Soo Kim "Investigation of Ship Performance Prediction Methods in Pack Ice"	(87) Robert Gash, Kevin Murrant and Jason Mills "Development of a Sensor Testbed for MASS Situational Awareness"
11:20 AM	(91) **J. Andrew Macneill** "Rapid Impact Test Apparatus (RHITA) for Conducting Ice and Model / Full Scale Structure Interactions"	(77) **Matthew Lee Robbins** and Bruce W.T. Quinton "Beyond the Breaking Point: Insights into Damage Accumulation from Repeated Impacts on Stiffened Ship Grillages"	(92) Kevin Murrant, Robert Gash, Wayne Pearson, Jason Mills, Shameem Islam and Marius Seidl "A Controller Topology for Moving Floating Objects with a Ship by Pushing"
11:40 AM			
12:00 PM		Lunch	
12:20 PM		C-CORE 50 years celebration	
12:40 PM		Keynote : "Adventures in Subsea Ice Risk Analysis" by Tony King	
1:00 PM			

	Salon C&D	Garrison & Signal	Avalon
	Session: (7A) Ice Mechanics Session Chair : Rocky Taylor	Session: (7B) Ship Performance in Ice Session Chair : Mikko Suominen	Session: (7C) Ship Navigation in Ice Session Chair : Richard McKenna
1:20 PM	(60) **Robert Gagnon** "A Novel Skate Blade and Associated Ice-Crushing Phenomena"	(105) Jungyong Wang, Yang Ji, Ayhan Akinturk and Joshua Barnes "A novel performance representation method for icebreakers in ice and open water using the CCGS Henry Larsen"	(97) **Wenbo Dong**, Fang Li, Shifeng Ding, Pentti Kujala, Guangwei He, Shixiao Fu and Li Zhou "Numerical Analysis of Dynamic Ice Submersion Force Acting on Heavy Icebreaker"
1:40 PM	(72) **Noah Osmond**, Rocky Taylor and Jungyong Wang "Design of a Novel Test Apparatus for Assessing the Effectiveness of Air Bubbler System in Reducing Ice Hull Resistance"	(128) **Brendon Nickerson** "Groundwork for modelling propulsion shaft transverse vibrations due to propeller-ice interaction"	(108) **Takatoshi Matsuzawa** and Eisuke Akane "POLARIS-based Assessment of Operational Limitation in the Arctic Ocean for R/V MIRAI II"
2:00 PM	(73) **Noah Osmond**, Jungyong Wang and Rocky Taylor "Assessment of the Effectiveness of Air Bubbler Systems in Reducing Hull-Ice Interaction Loads"	(133) **Gerhard Durandt** and Anriëtte Bekker "Utilizing an acceleration-strain transmissibility relationship for the prediction of midship strain on a Polar Vessel"	(121) Mordecai Chimedza, Thomas Browne and Rocky Taylor "Augmentation of Onboard Camera Data with Ship Manoeuvrability for Tactical Navigation Support in Ice"
2:20 PM	(80) **Edward J. D. Bryson**, Sthéfano L. Andrade and Bruce W. T. Quinton "Validation of Time History Model of a Ship Ice Collision for Spherical Cap Shaped Ice Samples"	(32) Jianqiao Sun, Yan Huang and Jinyuan Wang "Resistance components of a double-acting ship under stern-first icebreaking: Experimental methodology and preliminary results"	(145) **Yixin Wang**, Xiaodong Chen and Shunying Ji "Research on Ship Path Planning Method in Low Ice Concentration Areas"
2:40 PM	Refreshments Break		

	Salon C&D	Garrison & Signal	Avalon
	Session: (8A) Ice Mechanics Session Chair : Steve Bruneau	Session: (8B) Ship Performance in Ice Session Chair : Rob Hindley	Session: (8C) Environmental Modelling & Climate Change Session Chair : Ian Turnbull
3:00 PM	(40) **Aleksey Marchenko** and Atle Jensen "Methods of laboratory investigation of wave drift of model icebergs"	(135) Guoxu Liu, Xiaodong Chen, Shunying Ji and Yanwu Wang "Study of ice load characteristics based on full scale measurement on Xuelong 2 icebreaker"	(2) **Knut Vilhelm Høyland**, Vegard Hornnes and Blandine Duprat "Formation and growth of fjord ice in Hjellbotn in Trondheim fjord"
3:20 PM	(130) **Franz von Bock Und Polach** and Angelo Mario Böhm "Propeller-Ice Interaction experiments on a scaled S.A. Agulhas II Propeller"	(50) Xuhao Gang, Yukui Tian, Shaopeng Ji, Chaoge Yu, Shuai Kong and Ying Kou "Model testing and analytical research on ice breaking resistance of a segemented ship bow"	(3) **Ian Turnbull**, Rocky Taylor, Tony King, Matthew Asplin, James Bartlett, Dawn Sadowy, Keath Borg and Alka Dash "Trends in the Pack Ice Regime on Makkovik Bank, Offshore Labrador, 2003-2023"
3:40 PM	(148) **Shuang Yu**, Xiaodong Chen, Shunying Ji and Qinglin Duan "Experimental study on uniaxial compressive strength of Summer Arctic sea ice under impact loading"		(136) **Xiaodong Chen**, Weiping Yu, Shaoping Guo and Shunying Ji "Study of ice infected waters in China as a potential test site"
4:00 PM			
4:20 PM			
6:30 PM		Gala Banquet @ The Rooms POAC Founders Lifetime Achievement Award	

Start time	Salon A&B			Pre Function Area
7:00 AM	Breakfast			
7:20 AM				
7:40 AM				
8:00 AM	Opening			Registeration
8:20 AM				

	Salon C&D	Garrison & Signal	Avalon
	Session: (9A) Offshore Geotechnical Engineering/ Offshore NL Session Chair : Murray Brown	Session: (9B) Cold Regions Port & Coastal Infrastructure Session Chair : Nataly Marchenko	Session: (9C) Fixed Offshore Structures Session Chair : Mark Fuglem
8:40 AM	(103) **Lemuel Y. Thompson** and Bipul C. Hawlader *"Numerical modeling of pile installation for offshore foundations"*	(10) **David Parsons**, Alexander Wilson, Amaury Camarena, Kevin Bezanson and George Comfort *"Clyde River, Nunavut Small Craft Harbour – Embracing the Challenges of High Arctic Marine Engineering"*	(29) **Alexandra Pliss**, Knut Vilhelm Høyland, Bernt Johan Leira, Nicolas Serré, Sigurd Henrik Teigen and Dmitry Divine *"Statistical analysis of IPS-data in Fram Strait 2006 – 2011"*
9:00 AM	(96) **Tony King**, Mark Howell and Pradeep Bobby *"Ice Islands offshore Newfoundland and Labrador"*	(85) Sarah Khalil, Amgad Hussein, Stephen Bruneau and Leonard Lye *"The Utilization of Statistical Design Methodology in Predicting Abrasion Resistance of Concrete Mixtures Used in Harsh Environment: Durable Concrete and Sustainable"*	(61) **Robert Gagnon** *"Textured Panel for Ice-Induced Vibration Mitigation and Reduction of Associated Average Load"*
9:20 AM	(117) Renat Yulmetov, Kelley Dodge, Pradeep Bobby, Maria Yulmetova, Murilo Silva, Brad Elliott and Richard Hall *"Advanced iceberg surveillance using RCM"*	(30) **Robert Frederking** and Jeffrey Brown *"Guidance on ice loads on port structures in the Canadian Arctic"*	(134) **Jaakko Heinonen**, Eeva Mikkola and Maria Tikanmäki *"Effect of ice drift parameters to estimated fatigue damage in an offshore wind foundation"*
9:40 AM	Refreshments Break Keynote: "Mirai II: A New Chapter in Arctic Observation with Future Oceanographic Platform" by Takatoshi Matsuzawa		
10:00 AM			
10:20 AM			

	Salon C&D	Garrison & Signal	Avalon
	Session: (10A) Pipelines & Subsea Infrastructure Session Chair : Bipul Hawlader	Session: (10B) Cold Regions Port & Coastal Infrastructure Session Chair : Ivana Kubat	Session: (10C) From Research to Regulations & Standards Session Chair : Anne Barker
10:40 AM	(88) Mark Fuglem, Tony King and John Barrett *"Iceberg-Seabed Interactions - Balancing Scour and Environmental Driving Forces"*	(31) **Takahiro Takeuchi**, Bunta Yamauchi, Yuta Hayasaka and Shinji Kioka *"On ice pile-up height at the front of structure due to tsunami with sea ice"*	(84) **Anne Barker**, Stephen Bruneau, Bruce Colbourne and Austin Bugden *"It's a grey area: Observations of the apparent area of ice adhesion to concrete"*
11:00 AM	(47) *__Thomas Fitzpatrick__*, Rocky Taylor and Jan Thijessen *"Comparative Analysis of Compressive Failure Mechanics of Ice due to Ice-Particle and Spherical Steel Indentation Tests"*	(41) **Shinji Kioka**, Maiko Ishida and Takahiro Takeuchi *"Ice Jam and Pile-Up Formations Against Piloti-Type Structures Caused by Tsunami Run-Up with Sea Ice Floes"*	(68) Richard McKenna and Mark Fuglem *"Rational structural criteria for ice design"*
11:20 AM	(75) **Ali Ghasemi** and Hodjat Shiri *"AI-Driven Multi-Sensor Fusion for 3D Motion Tracking of a Subsea Steel Catenary Riser Using an AUV"*	(23) **Matthew Asplin**, David Fissel, Keath Borg and Alex Graham *"Sea Ice and Year-Round Shipping Analysis for a Potential Mackenzie Delta Ship Terminal"*	(49) **Mitchell Stroud**, Thomas Browne, Brian Veitch, Tien Trung and Manolo Mendez *"Policy and Governance Simulation for Arctic Marine Routes"*
11:40 AM	Lunch Best paper and presentation Student Award Andrew Kendrick Memorial Tribute		
12:00 PM			
12:20 PM			
12:40 PM			
1:00 PM			
1:20 PM	Bus Depart at 2:00 to The Launch, Holyrood, NL		
1:40 PM			
2:00 PM			
2:20 PM			
2:40 PM			
3:00 PM	POAC - MASS cross over session Where Ice Meets Innovation		
3:20 PM			
3:40 PM			
4:00 PM			
4:20 PM			
6:30 PM			