Thursday, 13 June

Parallel session 3

Room	Senaatszaal	Van Hasseltzaal	
Session	Propulsion of ships in ice	Marine icing	
Chairs	*G. Wilkman* *W. Lu*	*N. Serre* *A.B. Aalbers*	
13:30 - 13:50	Method for estimating the propulsion performance of a multi-shaft icebreaker in ice field *A.A. Dobrodeev* , *G.I. Kanevskii, A.M. Klubnichkin, K.E. Sazonov*	Model assumptions in rig icing and their implications *A. Bøckmann* , *O. Shipilova, O.C. Ekeberg*	
13:50 - 14:10	Development of propulsion technology of Arctic ships operating in ice, from MV Arctic to Norilskiy Nickel *G. Wilkman* , *S. Hänninen, T. Heideman*	Marine spray from wave run-up to a hull as input to icing models *A.B. Aalbers* , *J.S. Hoving*	
14:10 - 14:30	Research on overload method based on known ice resistance for self-propulsion test in conventional towing tank *S. Ji* , *Y. Tian*	Autonomous real-time sea spray measurement system for offshore structures *S.H. Teigen* , *O.C. Ekeberg, B. Myhre, H. Rustad, S. Petersen, E. Schrøder-Bråtane, S. Carlsen*	
14:30 - 14:50	Simplified ice impact load estimate for azimuthing thrusters *A. Kinnunen* , *I. Perälä, M. Tikanmäki*	Risk assessment of wind farm development in ice proven area *A.M. Mustafa* , *A. Barabadi, T. Markeset*	
14:50 - 15:20	Coffee break		Foyer

Parallel session 4

Room	Senaatszaal	Van Hasseltzaal	
Session	Ice-structure interaction modelling II/II	Climate change and the Arctic environment II/II	
Chairs	*F. Ralph* *W. Lu*	*K. Croasdale* *K. Riska*	
15:20 - 15:40	Non-smooth DEM simulation for interaction of conical structure and managed ice floes using breakable ice element *K. Hasegawa* , *S. Uto, H. Shimoda, D. Wako, T. Matsuzawa*	Long-term geothermal monitoring of the Arctic coast for assessment of their stability *O.V. Kokin* , *A.V. Kirillova, D.M. Frolov, S.V. Godetskiy*	
15:40 - 16:00	Bulk constitutive law and its importance in CEM simulations of ice-structure interaction *J. Zhang* , *D. Feng, S.D. Pang*	A low-cost coastal buoy for ice and metocean measurements *C. Petrich* , *M. O'Sadnick, Ø. Kleven, I. Sæther*	
16:00 - 16:20	Modeling of full scale DP in ice scenario using an advanced ice dynamics model *S. Islam* , *D. Watson, J. Brown, M. Sayed*	A philosophy to ensure the safety of floating structures in Arctic and cold regions *C. Makrygiannis* , *O. Dalane, P. Liferov, R. McKenna, P.O. Moslet, K. Riska, B. Wright*	
16:20 - 16:40	Coffee break		Foyer
16:40 - 17:30	Closing ceremony *Best student paper award & Presentation POAC 2021*		Senaatszaal *Chair: A. Metrikine*