

Norwegian University of Science and Technology





Knowledge Centre Ship Manoeuvring in Shallow and Confined Water







www.shallowwater.be

## Second International Conference on Ship Manoeuvring in Shallow and **Confined Water: Ship-to-Ship Interaction**

### Marine Technology Centre,

Otto Nielsens vei 10, Trondheim, Norway

#### PRELIMINARY CONFERENCE PROGRAM

(Sessions and Schedules are subject to change)

#### FIRST DAY: 18 May 2011 (Wednesday)

8:00-9:00	Regist	tration	
9:00-9:15	Opening address: Decan Ingvald Strømmen, NTNU		
9:15-10.00 Invited Keynote Speech by Simon Duncan, President of S			
	Ship to Ship Transfers – a global service		
	SESSION A1: Lightering (Chair: Prof. E. Pedersen)		
10:00-10.30	Decision-support system for STS training on ship handling simulator by means of visualization		
	of danger zone due to hydrodynamic interaction		
	K. Kirimoto, E. Pedersen		
10:30-10:50	Refreshment break		
	SESSION A1: Lightering (Chair: Prof. E. Pedersen)		
10:50-11:20	Ship to ship interaction forces during lightering operations		
	E. Lataire, M. Vantorre, J. Vandenbroucke, K. Eloot		
11:20-11:50			
	X. Xiang, R. Skejic, O. Faltinsen, T. E. Berg		
11:50-12:20	A new approach in modelling the interaction forces		
	A. Gronarz		
12:20-13:30	Lunch		
	SESSION F1: Overtaking and meeting in channels and canals (Chair: Dr. J. Duffy)	SESSION I1: Squat (Chair: Prof. KP. Rhee)	
13:30-14:00	The influence of different vessels's speed of	Optimisation of trim with respect to squat and	
	navigation on overtaking and meeting in	under-keel-clearance	
	navigable channels of hydro system Danube-	T. Berndt, A. Härting, A. Laupichler, J.	
	Tisa-Danube	Reinking	
	V. Škiljaica, I. Škiljaica, M. Živković		
14:00-14:30	Improved simulation model and methods for	Ship Squat Comparison and Validation Using	
	determination of the required passing distance	PIANC, Ankudinov and BNT Predictions	
	between ships in restricted fairways	M. J. Briggs, P. J. Kopp, V. Ankudinov, A. L.	
	K. Benedict, W. Köpnick, M. Baldauf, A.	Silver	
	Gronarz, B. Friedhoff, F. de Mello Petey		

14:30-15:00	Interaction-A practical viewpoint G. Maxwell	Squat during ship-to-ship interactions in shallow water
	G. Maxwell	K. Eloot, M. Vantorre, J. Verwilligen
15:00-15:30	Refreshment break	
	SESSION L1: Experimental investigations	SESSION H1: Shallow and confined water
	of interaction (Chair: Prof. K. Benedict)	effects (Chair: Dr. A. Gronarz)
15:30-16:00	Hydrodynamic interaction of two thin ships	CFD Prediction and validation of ship-bank
	with rudder in close proximity	interaction in a canal
	H. Yasukawa, S. Yoshida	L. Zou, L. Larsson, G. Delefortrie, E. Lataire
16:00-16:30	Integration and testing of STS decision-	An experimental research on the hydrodynamic
	support system in a ship maneuvering	forces acting on a twin-screw ferry during
	simulator	unberthing
	D. Husjord, T. A. Øritsland, E. Pedersen	S. Lee, J. Park, KP. Rhee, W. Yoo
16:30-17:00	A comparative study of PIV experiments and	The importance of the form of time domain
	numerical simulations of flow fields around	forces and moments on berthed ship
	two interacting ships	interaction
	T. Arslan, B. Pettersen, J. Visscher, C.	J. T. Duffy, M. R. Renilson
	Muthanna, H.I. Andersson	

# SECOND DAY: 19 May 2011 (Thursday)

8:15-09:15	Registration	
9:15-10.00	Invited Keynote Speech by Odd Faltinsen, Professor at NTNU	
	Modeling of ship	p-ship interaction
	SESSION F2: Overtaking and meeting in c	hannels and canals (Chair: Prof. M. Vantorre)
10:00-10.30	Post widening ship/ship interaction and operational decisions in the Panama Canal L.L. Daggett; J.C. Hewlett; R.S. Gray	
10:30-11:00	Numerical investigation on ship-ship hydrodynamic interaction in restricted waters  C. Zhang, Z. Zou	
11:00:11.20	Refreshment break	
	SESSION E1. Mooyed and passin	ag vessels (Chair: Brof D. Battarson)
11:20-11:50	SESSION E1: Moored and passing vessels (Chair: Prof. B. Pettersen)  Prediction of hydrodynamic interaction effects of vessels in ports  J. A. Pinkster	
11:50-12:20	Calculation of forces on moored ships due to passing ships W. van der Molen, P. Swiegers, J. Moes, M. Vantorre	
12:20-12:50	The use of a Boussinesq-type wave model to determine ship-induced waves over non-uniform bathymetries  A. van der Hout, O. Weiler, M. Borsboom	
13:00-14:20	Lu	nch
	SESSION L2: Interaction – numerical studies (Chair: Prof. J. Pinkster)	SESSION H2: Shallow and confined water effects (Chair: Prof. K. Eloot)
14:30-15:00	Interactions between two flat plates at different positions in a current D. Yang, H.I. Andersson, B. Pettersen, V.D. Narasimhamurthy	Prediction of linear hydrodynamic derivatives in shallow water Y. Furukawa; Y. Nakiri; K. Kijima
15:00-15:30	Numerical study of ship-to-ship interaction forces on the basis of various flow models J.M.A. Fonfach; S. Sutulo; C. Guedes Soares	A study on estimation of hydrodynamic forces acting on a ship hull in shallow water by CFD Y. Kimura, E. Kobayashi, Y. Tahara, S. Koshimura
15:30-16:00	URANS studies of ship-ship interactions in shallow water H. Sadat-Hosseini, PC. Wu, Y. Toda, P. Carrica, F. Stern	New thinking on ship generated hydrodynamic fields: Introducing concepts for predicting bank suction and rejection P. J. McArthur

16:00-16:15	Refreshment break	
	SESSION J1: Interaction Ship – Floating	SESSION G1: Ship - tug interaction
	bodies (Chair: Dr. L. Daggett)	(Chair: Prof. K. Kijima)
16:15-16:45	Investigating ship maneuvers around a floating	CFD based prediction of ship-ship interaction
	structure under the influence of a uniform	forces on a tug beside a tanker
	current in deep and calm water	C. D. Simonsen, C. K. Nielsen, J. F. Otzen, K.
	R. Skejic, M. Breivik, T. E. Berg	Agdrup
16:45-17:15	Simulation of the Launch/Recovery of a	Interaction forces in tug operations
	Submersible from a Host ship	S. Geerts, M. Vantorre, K. Eloot, R.
	D. Cassidy, P. Carrica, M. Hyman	Huijsmans, N. Fierens

## THIRD DAY: 20 May 2011 (Friday)

08:30-09:30	Registration	
	SESSION B1: Replenishment (Chair: Dr. R. Skejic)	SESSION G2: Ship – tug interaction (Chair: Prof. M. Vantorre)
09:30-10:00	Seabase model tests and surface effect ship code evaluation for T-craft  A.L. Silver, M.J. Hughes, R.C. Bishop, S.S. Lee, D.W. Wundrow, J.F. O'Dea	Slack towline on tow-towed ships interaction during maneuvering  A. Fitriadhy, H. Yasukawa, Y. Masaki
10.00-10:30	Using dynamic positioning for side-by-side cargo transfer operations F.H.H.A. Quadvlieg, R. Hallmann, G. Hughes, D.H. Harris	Dynamic interaction between tow and towed ships in head seas Y. Nakayama, J. Watanabe, H. Yasukawa
10:30-11:00	Refreshment break	
	SESSION A2: Lightering – Operational aspects (Chair: Dr. T.E. Berg)	SESSION 12: Squat / SESSION H3: Shallow and confined water effects (Chair: Prof. K. Eloot)
11:00-11:30	Relative distances and speeds measurement system for STS lightering operations using stereo-cameras  E.Shimizu, E. Pedersen	Numerical investigation of bank influence on a ship motion A.M. Chetvertakov, M.P. Lebedeva, D.V. Nikushchenko
11:30-12:00	Decision support system in ship-to-ship operations using high accuracy DGPS  E. Okuyama, H. Oda, E. Shimizu	Squat computation for container ships in restricted waterways  A. von Graefe, B. El Moctar, V. Shigunov, H. Söding, T. Zorn
12:00-12:30	Critical elements of a lightering operation G. Gudmundset	Squat of ships sailing in a non centered track in a canal H. J. de Koning Gans
12:30-12:45	Closing Remarks by Marc Vantorre, Professor at Ghent University	
12:45-14:00	Lunch	
14:00-17:00	Afternoon visits	