

Opening Session

Monday 4 July (09:00 – 10:00)

Keynote 1:

Monday 4 July (10:00 – 11:00)

New Technology: SPH for Coastal Processes

Prof. Robert A. Dalrymple
Johns Hopkins University, Civil Engineering - USA

Monday 4th – July

Sessions 1.1: 11:30 to 13:30

Room A	Room B	Room C	Room D	Room E
1,1: Direct methods for waves measurement (1)	7,4: New simulation techniques (1)	6,1: Physical models:Wave generation and measurement (1)	4,3: Run-up and overtopping	9,3: Ind. Oc. Tsunami: prevention and monitoring
Chaired by Chung-Chu Teng	Chaired by Josep Medina	Chaired by Bill Seaberg	Chaired by Billy Edge	Chaired by E. Pelinovsky
1 On wave measurements with buoys in shallow water <i>Arntsen, Ø. A.; Torum, A.</i>	182 Wave-Breaking Graphics by MPS Method with Sub-Particle-Scale Texture Model <i>Sakai, T., Gotoh, H., Ikari, H.</i>	126 Micro-modeling of wave fields <i>Fröhle P., Müller G.</i>	99 A Comparison of Empirical, Semi-Empirical and Numerical Wave Overtopping Models <i>Reis, M.T., Hu, K., Hedges, T.S.</i>	223 Can HF Radar detect a tsunami? <i>Wyatt, L. R., Moorhead, M.</i>
2 Intercomparison experiments of different methods of directional wave measurement <i>Lee, D.Y., Shim, J.S., Mao, J., Kim, S.I., Park, K.S.</i>	183 Spectral/hp Element Methods – the Next Generation of Numerical Wave Models in Coastal Engineering? <i>Eskilsson, C., Engsig-Karup, AP, Sherwin, S.J., Hesthaven, J.S., Bergdahl, L.</i>	127 Spatial Evolution of Directionally Distributed Water Surface Waves: Numerical Simulation and Experiment <i>Trulsen, K.</i>	100 Prototype measurement and analysis of overtopping waves individual volume at the Roma yacht harbour rubble mound breakwater <i>Bellotti, G., Briganti, R., Franco, L.</i>	224 An Inexpensive, Sustainable Network for Monitoring Tsunami <i>Goring, Derek G.</i>
3 Measuring Directional Waves and Surface Currents Using Horizontally Mounted ADCPs. <i>Strong B., Brumley B., Mullison J., Terray E.</i>	184 Computing Non-breaking and Breaking Waves Using an Efficient Nonhydrostatic Free-Surface Flow Model <i>Zijlema, M., Stelling, G.S.</i>	128 Laboratory Measurements of Solitary Wave Damping, Shoaling, and Runup <i>Vandever, J. P. and Liu, P. L-F.</i>	101 Prediction of Solitary Wave Run-up on an Arbitrary Plane Beach <i>Taylor, P. H., Borthwick, AGL, Ford, M., Weston, B., Stansby, PK</i>	225 Comparative study on the grain size distribution and net sediment transport along the south west coast of India in the pre and post Tsunami periods <i>K.C. Praseeda</i>
4 Directional Wave Data Measured from Data Buoys Using Angular Rate Sensors and Magnetometers <i>Teng, Chung-Chu; Bouchard, Richard.</i>	185 Numerical simulation for large deformation of fluid-solid interaction using CIP-EDEM method <i>Mutsuda, H., Shimizu, K., Doi, Y., Takahashi, Toshiyuki</i>	129 Waves in numerical and physical wave basins – a deterministic combination <i>Zhang, Haiwen and Schäffer, Hemming, A.</i>	102 Long Waves in the Surf and Swash <i>Karunaratna, H., Chadwick A J</i>	226 Behaviour of shoreline between groin field and its effect on the tsunami propagation <i>Sundar, V.</i>
5 Wave directional Observation by Arrayed Wave Height Meter in Extremely Shallow Water <i>Yoo, Y., Kouguchi, N., Fujii, H., Ishida, H. and Deguchi, I.</i>	87 Study of Tsunami Mitigation Using a 3D SPH Method <i>Gómez-Gesteira, M., Crespo, A.J. C. & Dalrymple, R.A.</i>	130 Distribution of Impact Pressures on the Surface of Inclined Cylinder Caused by Laboratory Breaking Waves <i>Hong, K., Shin, S.-H.</i>	103 Liquid-Gas Two-Phase-Flow MPS Method for Simulation of Wave Overtopping <i>Ikari, H., Gotoh, H., Sakai, T.</i>	227 Hindcast of Flooding caused by Tsunami in Aceh – Sumatra <i>Vatvani D., Schrama E.J.O., Kernkamp H.W.J., Boon J.G.</i>
				228 Proposals to the Optimal Placement of the Sea Level Stations for the Operative Tsunami Warning in the Indian Ocean <i>Poplavsky, AA, Khramushin, V. N.</i>

Monday 4th – July

Sessions 1.2: 15:00 to 16:20

Room A	Room B	Room C	Room D
1,1: Direct methods for waves measurement (2)	7,4: New simulation techniques (2)	6,1: Physical models:Wave generation and measurement (2)	4,1: Waves -currents interaction
Chaired by Evert Bouws	Chaired by Tetsuo Sakai	Chaired by Mike Briggs	Chaired by Íñigo Losada
6 High Frequency Low Amplitude Waves Study On A Marina To Perform Outside-Inside Transfer Function Evaluation <i>Benito,C., Santás,J C, Zatarain, J.L., Navarro A., Martín M.J.</i>	186 Smoothed Particle Hydrodynamic Simulation on Sediment Suspension under Breaking Waves <i>Zou, S, Rogers, B. D., Dalrymple, R. A.</i>	131 Laboratory Measurements of Waves and Wave-Induced Currents At a Jettied Inlet <i>Seabergh, W, Lin, L., Demirbilek, Z.</i>	91 Modelling the Effect of Wave Current Interaction on Morphological Evolution in The Bristol Channel U.K. <i>Jones, O.P., Harris, J.M.</i>
7 Wave measurements from a subsurface platform <i>Pedersen, T., Lohrmann, A, Krogstad, H.</i>	187 SPH-LES two phases simulation of breaking waves <i>Cuomo, G., Panizzo, A., Dalrymple, R. A.</i>	132 Experimental Determination of Friction Coefficient and Velocity Profiles for Wave-Current perpendicular interaction <i>Fernando, M.P.C., Guo, J., Lin, P.</i>	92 Determining the Influence of Wave-Current Interaction on the Bottom Shear Stress through Numerical Calculations with a Coupled Model <i>Ocampo-Torres, F.J., Rosales, P., Monbaliu, J.</i>
8 Desk study to optimise wave instrumentation for large and shallow Dutch lakes <i>Ruijter, M., Bottema M., van den Boomgaard M.</i>	188 Coherent turbulent structures in a quasi-steady spilling breaker <i>Misra, S. K., Kirby, J. T., Brocchini, M., Veron, F. and Thomas, M.</i>	133 On Generation of Single Steep Waves in Tanks <i>Shemer, L., Grüne, J., Goulitski, K., Kit, E., Schmidt-Kopenhagen, R.</i>	93 A numerical study on the effect of wave-current interaction processes in the hydrodynamics of the Irish Sea <i>Osuna, P., Wolf, J.</i>
17 Swell transformation on a microtidal barred beach (Sète, France) <i>Certain, Raphaël; Meulé, Samuel; Rey, Vincent; Pinazo, Christel</i>	189 Three dimensional sph-sps modeling of wave breaking <i>Rogers, Benedict D. and Dalrymple, Robert A.</i>	134 Wave Resonances Detected in a Wave Tank and in the Field <i>Büsching, F.</i>	

Monday 4th – July

Sessions 1.3: 16:40 to 18:00

Room A	Room B	Room C	Room D
<p>1,2: Optical methods for waves measurement</p> <p>Chaired by José Carlos Nieto</p>	<p>7,4: New simulation techniques (3)</p> <p>Chaired by Hitoshi Gotoh</p>	<p>6.2: Waves and structures</p> <p>Chaired by Mike Briggs</p>	<p>2,3: Extreme waves analysis</p> <p>Chaired by Yoshimi Goda</p>
<p>9 Development and validation of a stereo-matching algorithm for measuring water waves image sequences <i>Benetazzo, A., Simione, E.</i></p>	<p>190 A Hybrid Finite Element and SPH Model for Forced Oscillations in Basins <i>Narayanaswamy, M., Dalrymple, R.</i></p>	<p>135 Field Study on Long Wave Characteristics in Shallow Waters <i>Gutiérrez-Serret, R., Lozano, J., Carrasco, A.</i></p>	<p>73 A model for the analysis of trends of extreme value wave climate <i>Méndez, F.J., Menéndez, M., Luceño, A., Losada, I.J.</i></p>
<p>10 PIV Applied to Near-shore Video Images <i>Fritz, H., Yoo, J., Barnes, C., Haas, K., Work, P.</i></p>	<p>191 Analytical and SPH approaches to simulate landslide generated waves runup <i>Di Risio M., Panizzo A.</i></p>	<p>136 Wave Shoaling Analysis Near Submerged Breakwaters <i>Taveira Pinto, F., Valente Neves, A. C.</i></p>	<p>74 Steep Wave Kinematics and Interaction with a Vertical Column <i>Kristiansen, T., Baarholm, R., Stansberg, C.T., Hansen, E.W.M., Rørtveit, G.</i></p>
<p>11 Wave Property Estimation using Linear Feature Extraction from Nearshore Wave Images <i>Yoo, J., Barnes, C., Fritz, H., Haas, K., Work, P.</i></p>	<p>192 Possibilities of the Particle Finite Element Method (PFEM) for Analysis of Port Structures under Wave Loads <i>Oñate, E., Celiagueta, M.A., Idelsohn, S.R., Del Pin, F.</i></p>	<p>137 Design Approach of Nuclear Safety-related Submerged Intake Structure Controlled by Wave Actions at Open Sea <i>Nam Ho Lee, Sung Myeon Yi, Mads B. Bryndum.</i></p>	<p>75 Analysis of Statistical Wave Properties of Linear and non Linear Two-Dimensional Wave Fields Derived from Stochastic Simulations <i>Nieto Borge, J.C., Schulz-Stellenfleth, J., Niedermeier, A., Lehner, S.</i></p>
	<p>193 Development and Implement of a Spectral Finite Element Wave Model <i>Hsu, T.-W., Liaw, J.-M., Ou, S.-H., Zanke, U.C.E., Roland, A., Mewis, P.</i></p>	<p>138 Flow Visualization on a Solitary Wave Propagating over a Submerged Rectangular Dike <i>Lin, C., Chang, S.-C., and Chang, K.-A.</i></p>	

Tuesday 5th, July

Sessions 2.1: 09:00-11:00

Room A	Room B	Room C	Room D
<p>1,3: Measurement of waves by Radar Systems (1)</p> <p>Chaired by Susan Lehner</p> <p>12 HF radar and the UK wave monitoring network, WAVENET <i>Wyatt, L.R., Green, J.J., Moorhead, M.</i></p> <p>13 X-Band radar as a tool to determine spectral and single wave properties <i>Reichert, K., Hessner, K., Tränkmann, I.</i></p> <p>14 High-Frequency Radar Observations of Surface Waves Propagating across as Western Boundary Current <i>Haus, B. K., Shay, L. K., Wyatt L. R.</i></p> <p>15 Wave and Current Fields Extracted from Marine Radar Images <i>Wu, L.C., Doong, D.J., Kao, C.C., Lin, C.F.</i></p> <p>16 Development of wave directional spectrum estimation from an HF ocean radar with a single radar array <i>Hisaki, Y.</i></p>	<p>7,3: Waves - structures interaction (1)</p> <p>Chaired by Joachim Grüne</p> <p>176 Modeling Wave Conditions in a Shallow-Draft Harbor for Breakwater Design <i>Briggs, M., Demirbilek, Z., Nook, K., and Donnell, B.</i></p> <p>177 Trivariate design load characterization. Application to structural design. <i>Martin M^o.J., Aberturas ,P.</i></p> <p>178 Numerical simulation of wave groups with a VOF-type model on an impermeable slope <i>Losada, I. J., Lara, J. L., Liu, P. L-F</i></p> <p>179 Irregular wave runup on porous structures and cobble beaches <i>De las Santos, F.J., Kobayashi, N., Meigs, L.E.</i></p> <p>180 Viscous effects on wave shoaling over a submerged mound <i>Orfila. A., Wang, X., Simarro, G., Liu, P. L-F.</i></p> <p>181 Pressure Impulse on Seawater Exchange Breakwater <i>Lee, C., Kim, G., Ahn, S., Suh, K-D.</i></p>	<p>7,2: Wave propagation numerical models (1)</p> <p>Chaired by Kyung-Duck Suh</p> <p>147 Wave Breaking Implementation into a Nonlinear Finite Element Mild Slope Model <i>Fortes, C. J., Zózimo, A.C., Fernandes, J.L.M.</i></p> <p>148 A Simplified Approach to obtain Wave Height Distributions within a Harbour. <i>Menéndez, Kind, M.</i></p> <p>149 Internal Generation of Waves: Line Source Method Versus Source Function Method <i>Kim, G., Lee, C., Suh, K.-D.</i></p> <p>150 Influence of Spectral Shape on Wave Period Parameters and Design Methods in Time Domain <i>Ohle, N., Daemrich, K.-F., Tautenhain, E.</i></p> <p>151 A Boussinesq Model for Wave Breaking and Runup in a Coastal Zone;1D <i>Hirayama, K., Hiraishi, T.</i></p> <p>152 Wave-induced uplift forces acting on half-buried pipeline in sandy seabed <i>Talebeydokhti, N., Afzali, E.</i></p>	<p>8: National and International networking projects</p> <p>Chaired by Hans Dahlin</p> <p>Special Keynote: "EuroGOOS: from its beginning and future perspectives" <i>Hans Dahlin, Director, EuroGOOS, EuroGOOS Office, SMHI, Sweden</i></p> <p>206 The role of satellite wave data in the worldwaves project <i>Barstow, S.F., Mørk, G., Lønseth, L. and Schjølberg, P.</i></p> <p>207 On the importance of spectral wave observations in the continued development of global wave models <i>Bidlot J.-R., Janssen P.A.E.M., Abdalla S.</i></p> <p>208 Validation of the Met Office Global Spectral Wave Model with Buoy and Satellite Observations <i>Li, J. G., Holt, M.</i></p> <p>209 Development of the nationwide coastal wave information network in Mexico <i>Mantoya, R., J., M., Duarte, O., P.</i></p> <p>210 Validation Issues for a Global Coastal Wave Forecasting System <i>Tozer, N.P, Millard T.K. and Saulter, A.</i></p>

Tuesday 5th, July

Sessions 2.2: 11:30-13:30

Room A	Room B	Room C	Room D
1,3: Measurement of waves by Radar Systems (2)	7,5: Numerical wave tanks	7,2: Wave propagation numerical models (2)	2,2: Freak waves (1)
Chaired by Lucy Wyatt	Chaired by Hemming Schäffer	Chaired by Philip L. Liu	Chaired by Harald Krogstad
18 Comparison of direct wavenumber spectra from point gauges and radar imaging systems <i>Donelan, M.A., Magnusson, A.K., Rosenthal, W., Lehner, S., and Krogstad, H.</i>	194 High-Order Spectral numerical modelling of a 3D wave basin compared to experiments. <i>Bonnefoy, F., Le Touzé, D., Ferrant, P.</i>	153 A rational method for design storm estimation behind shoals <i>Aberturas, P., Martin, M.J.</i>	61 Coupled 2D Hydrodynamic-Sediment Transport and Wave Models, Study Case for a Hurricane Event in Matagorda Ship Channel. <i>Edge, B., Pandoe, W.</i>
19 Integration of X-band remote-sensing and numerical modeling of waves <i>Kleijweg, J., Van Vledder, G.Ph.</i>	195 Free-surface Lattice Boltzmann Simulation of Shallow Water in Horizontally Moving Tanks <i>Frandsen, J.B., Tubbs, K. R., Peng, W.</i>	154 Numerical simulation of Wave Propagation in Toulon Bay <i>Bonet, R.P., Redondo, Jose. A.</i>	62 Energetic Wave Groups and Growth of Extreme Waves <i>Stansberg, C.T.</i>
20 Study of on and offshore wave fields from Synthetic Aperture Radar images <i>Schneiderhan, T., Nieto Borge, J.C., Schulz-Stellenfleth, J., Niedermeier, A., Lehner, S., König, T.</i>	196 Development of Numerical Wave Flume by 3D MPS Method <i>Gotoh, H., Ikari, H., Sakai, T.</i>	155 Swan Hindcast in the Black Sea <i>Guedes Soares, C., Rusu, E.</i>	63 An Analysis of the "Halloween" Storm <i>Espinar-Cerrejon, S., Ruiz-de-Elvira, A.</i>
21 Wave Height Variability over the Mediterranean Sea using Altimeter Data <i>Queffeuou, P.</i>	197 Wave energy focusing in a three-dimensional numerical wave tank <i>Grilli, S., Fochesato, C. and Dias, F.</i>	156 The use Serre's Model for Water Waves Generated by Local Disturbance Analysis <i>Nascimento, M.F., Maciel, G.F.</i>	64 Determining the 10,000 year wave conditions in a tropical cyclone region <i>Hardy, T.A., Mason, L.B., Bode, L., Astorquia, A., McConochie, J.D. and Harper, B.A.</i>
22 A parametric scheme for the retrieval of 2-D ocean wave spectra from synthetic aperture radar look cross spectra <i>Schulz-Stellenfleth, J., Nieto-Borge, J.C.</i>	198 Viscous effects on the propagation of solitary waves in a wave tank: a numerical model <i>Simarro, G., Orfila, A., Liu, P. L-F.</i>	157 Verification and Improvement of a Spectral Finite Element Wave Model <i>Roland, A., Zanke, U.C.E., Mewis, P., Ou, S.H., Hsu, T.W., Liau, J.M.</i>	65 Sample Distribution of Storm-Type Separated Return Wave Height on the Northwestern Pacific Ocean <i>Nonaka, H., Yamaguchi, M., Hatada, Y., Ohfuku, M.</i>
	199 A Comparative Study of Major Random Wave Separation Methods Applied to Boussinesq-type Numerical Wave Flumes <i>Subramaniam, N., Li, F. F., Ingram, D.M., Mingham, C.G.</i>	158 BBB Formula Revisited: Incorporate Pressure Gradient into Energetics Models <i>Zhao, Q. and Kirby, J. T.</i>	66 Observation and analysis of extreme waves in the North-Eastern part of the Black Sea <i>Divinsky, B.</i>

Tuesday 5th, July

Sessions 2.3: 15:00-16:20

Room A	Room B	Room C	Room D
1,4: Waves analysis methods (1)	7,1: Numerical prediction of waves (1)	3,3: Long Waves models	2,2 Freak waves (2)
Chaired by Luc Hamm	Chaired by Dong-Young Lee	Chaired by Peter Frigaard	Chaired by E. Pelinovsky
23 Comparative Analysis of Wave Transformation at Structures in Shallow Water Using FFT, Wavelet and Hilbert-Huang-Transform <i>Bruehl, M., Oumeraci, H.</i>	139 High Resolution Wind-Wave Modeling in NW Mediterranean <i>Cateura, J., Bolaños, R., Sánchez-Arcilla, A.</i>	86 Formation of Secondary Waves <i>Saprykina I.a., Kuznetsov S.</i>	67 Wind-Waves During the Rare South Atlantic Cyclone Catarina, March 2004 <i>Alves, J.H.G.M.</i>
24 Measurement and Analysis of Multidirectional Waves Using Free Surface Slopes <i>Cornett, A., Miles, M., Mansard, E., Pelletier, D.</i>	140 A wave forecasting system developed for the Spanish harbors <i>Gómez Lahoz, M., Carretero Albiach, J.C.</i>	83 Application of a Two-Dimensional, Depth-Integrated Tidal Flow Model to a River and Estuarine System <i>Bacopoulos, P. and Hagen, S.C.</i>	68 Breaking of Positive and Negative Solitary Waves <i>Lawrence, A., Kobayashi, N.</i>
25 Approaches, methods and some results of wind wave climate investigations <i>Lopatoukhin L., Boukhanovsky A.L.</i>	141 Wave Forecasting System For Seas Off Japan <i>Tom, T., Ogawa, K., Mase, H.</i>	84 Towards an Integrable Short and Long Wave Model for Tidal Hydrodynamics <i>Funakoshi, Y., Hagen, S.C.</i>	69 Extreme wave statistics from radar data sets <i>Lehner, S., Günther, H., Rosenthal, W.</i>
26 Phase-resolving analysis of short-crested wave fields and application to wave forces on a ship <i>De Jong, M.P.C., Weiler, O.M., Borsboom, M.J.A., Van Dongeren, A.R.</i>	142 Wave data assimilation scheme with measurement forecast <i>Sannasiraj, S.A., Babovic, V.</i>	85 A 2-D Model of Tide and Freshwater Flow Interaction for the Winyah Bay, Waccamaw River, and Atlantic Intracoastal Waterway <i>Hagen, S.C., Bacopoulos, P., Salisbury, M.B., and Murray, R.R.</i>	70 The Mechanism of Formation of Extreme Waves on Black Sea <i>Kuznetsov, S., Saprykina, I.a., Kosyan, R. and Pushkarev, O.</i>

Tuesday 5th, July

Sessions 2.4: 16:40–18:00

Room A	Room B	Room C	Room D
1,4: Waves analysis methods (2)	7,1: Numerical prediction of waves (2)	3.4: Tsunamis	2.1: Wave description models (1)
Chaired by Van Vledder	Chaired by Roop Lalbeharry	Chaired by Derek Goring	Chaired by Leonid Lopatoukhin
27 Application of Orthogonal Polynomials for the Distribution of Wave Heights in Finite Water Depth <i>Ahn, K., Ochi, M.K.</i>	143 Improvements in Prediction for Spectral Wave Forecast Models Through Increased Resolution in Frequency and Direction. <i>Fullerton, G.H., Holt, M.W.</i>	88 Tsunami landslide generation: modelling and experiments <i>Enet, F., Grilli, S.</i>	42 On The Reflection Of Non-Linear Random Wave Groups With High Crests <i>Arena, F., Romolo, A.</i>
28 On the Estimation of Directional Spreading from a Single Wave Staff <i>Taylor, P.H., Walker, D.A.G. and Eatock Taylor, R.</i>	144 The Role of Atmospheric Stability in Wind Wave Prediction: a Practical Application in the Bay of Seine (France) <i>Hamm, L., Jones, D., Gorjux, B.</i>	89 The Numerical Model of the Early Tsunami Warning <i>Zaytsev, A., Korolev, Yu.</i>	43 Models for Interfacial Capillarity-Gravity Waves in the Long-Wave Limit <i>Kalisch, H.</i>
	145 Hindcasts of the Wave Conditions in Approaches to Ports <i>Rusu, L., Pilar, P., and Guedes Soares, C.</i>	90 A Tsunami Warning System for the Use of Emergency Management Officials <i>Lee, Jung L.</i>	44 Statistics of Nonlinear Wave Groups <i>Tayfun, M. A.</i>
	146 Small Scale Wave Climate Prediction <i>Silva, R., Mendoza, E, Perez, D.</i>		

Wednesday 6th, July

Sessions 3.1: 10:00–11:00

Room A	Room C	Room D
<p>1,5: Networks and waves data banks (1)</p> <p>Chaired by Carl Stanberg</p> <p>29 Real time buoy data quality control and exploitation <i>Alfonso, M., López, J.D., Álvarez, E., Ruiz, M.I.</i></p> <p>30 Real time monitoring of Spanish coastal waters: the Deep Water Network. <i>Alvarez Fanjul, E.; Alfonso, M.; Ruiz, M.I.; López, J.D.; Rodríguez, I.</i></p> <p>31 Extreme Wave Conditions In A Torrential Climate. The Catalan Case <i>Gómez Aguar, J; Espino, M; Sánchez-Arcilla, A; Solano, M; Vela, J; Herreras, L.</i></p>	<p>9.2: Ind. Ocean Tsunami modeling</p> <p>Chaired by David Kriebel</p> <p>220 Application of Lagrangian description to the modeling of tsunami <i>Pelinovsky, E., Choi, B., Zaitsev, A., Didenkulova, I.</i></p> <p>221 Numerical Simulations of the 12/26/04 Indian Ocean Tsunami using a Higher-order Spherical Coordinate Boussinesq model <i>Watts, P., Kirby, J., Ioualalen, M., Grilli, S.</i></p> <p>222 Development and implementation of a tsunami wave propagation model at JRC <i>Anunziato, A.</i></p>	<p>2,2: Freak waves (3)</p> <p>Chaired by Akira Kimura</p> <p>71 Waves measurements in the ocean limit of the River Plate estuary <i>Anschütz G.</i></p> <p>72 Freak Edge Waves <i>Pelinovsky, E., Lechuga, A., Kurkin, A., Poloukhina, O., Dubinina V.</i></p>

Keynote 2:

Wednesday 6th, July. 09:00 to 10:00

Analysis of Wave Measurements –
Methods and Recent Developments

Prof. Harald E. Krogstad – NTNU – NORWAY

Wednesday 6th, July

Sessions 3.2: 11:30-13:30

Room A	Room B	Room C	Room D	Room E
1,5: Networks and waves data banks (2)	7,2: Wave propagation numerical models (3)	3,2: Seiches, resonances and harbour oscillations	2,1: Wave description models (2)	9,1: Ind. Oc. Tsunami: Data and observed effects
Chaired by Tomás Echegoyen	Chaired by Ángel Menéndez	Chaired by Jang Won Chae	Chaired by Michel Benoit	Chaired by Hermann Fritz
32 Spectral Wave Climate at Northern Spain's Mediterranean Coast <i>Bolaños, R., Rotés, A., Sánchez-Arcilla, A.</i>	159 An optimized solution method for the elliptic mild-slope equation <i>Grassa, José M.</i>	77 Simulation of Long Wave Agitation in Ports and Harbours using a Time-Domain Boussinesq Model <i>Kofoed-Hansen, H., Kerper, D.R., Sørensen, O.R., Kirkegaard, J.</i>	45 Estimation of Incident and Reflected Waves using Local and Global Methods <i>Figueroes, M., Medina, J.R.</i>	212 Manifestation of the Indian Ocean Tsunami of December 26, 2004 in the near source zone and its numerical modeling <i>Kaistrenko, V., Korolev, Yu., Zaytsev, A., Razjigaeva, N., Polukhin, N., Yalciner, A., Ersoy, S., Perincek, D., Praselia, G., Hidayat, R.</i>
34 Reconstruction of significant wave height time series using neural networks <i>Medina, J.R. and Serrano-Hidalgo, O.</i>	160 A Convolution Method for Nonlinear Dispersive Wave Transformation over a Mild-Slope 1-D Bottom <i>Schäffer, H.</i>	78 Optimization of an Unstructured Finite Element Mesh for Tide and Storm Surge Modeling Applications in the Western North Atlantic Ocean <i>Kojima, S. and Hagen, S.C.</i>	46 Blocking of periodic and random waves <i>Suastika, I.K., Battjes J.A.</i>	213 Modeling of two global tsunamis in the Indian Ocean (1883 Krakatau eruption and 2004 Sumatra earthquake) <i>Pelinovsky, E., Choi, B., Zaitsev, A., Didenkulova, I.</i>
35 Proyecto Olas Chile "The Development of a Reliable Long Term Wave Climate for the Entire Chilean Coastline" <i>Pantoja, C., Nicolau del Roure, F., and Scott, D.</i>	161 Wave Sediment Interaction on a Muddy Shelf <i>Sheremet, A. and Kaihatu, J. M.</i>	79 Forecasting Infragravity Wave Energy within a Harbour <i>McComb, P., Gorman, R., Goring, D. G.</i>	47 On the shape of nonlinear wave trains <i>Toffoli, A., Magnusson, A.K., Bitner-Gregersen, E., Monbaliu, J., Babanin, A., Dumon, G.</i>	214 Post Tsunami studies along Tamilnadu coast, India <i>Sannasiraj, S.A., and Sundar, V.</i>
36 Storms on the Cantabrian coast: correlation between wave heights and relationship between wave periods <i>Sotillo M.</i>	162 Recent developments in WAVEWATCH III at NCEP <i>Tolman, Hendrik L.</i>	80 A Rissaga Nowcasting System <i>Goring, D. G.</i>	49 Nonlinearity of sea waves by Hilbert Huang Transform Method <i>Veltecheva, A. D., Pascoal, R. Guedes Soares C.</i>	215 Field Survey of the Indian Ocean Tsunami on Sri Lanka's South Coast <i>Synolakis Costas E., Fritz Hermann M., Titov Vasily V.</i>
37 Intercomparison of Long-Term Wave Data Estimated on the Sea Area around Japan <i>Hatada, Y., Yamaguchi, M., Ohfuku, M., Nonaka, H.</i>	163 Evaluation of a Deep-Water Source Term Balance in SWAN Featuring Local Saturation-Based Dissipation <i>Van der Westhuysen, A. J., Zijlema, M., Battjes, J. A.</i>	81 Evaluation of Seiche regimes in Ciutadella Cove, Menorca (Spain) <i>Agudelo, P., Marcos M., Lomonaco, P., Monserrat, S., Medina, R.</i>	50 A Pseudo-spectral Method for Surface Waves in Water of Variable Depth <i>Choi, W.</i>	
	164 Development of a Virtual Wave Buoy for the Port of Cape Town, South Africa <i>Rossouw, M., Luger, S., Patel, S.R., Kuipers, J.</i>	82 Sheltering of long period waves to a rectangular harbor by a resonator <i>Nakamura, T.</i>		

Wednesday 6th, July

Plenary session: 15:00-16:20

Room E

Indian Ocean plenary session (1)

ASCE/COPRI Post-Tsunami Assessments

Chaired by Robert A. Dalrymple

In this session, the findings of the American Society of Civil Engineers' (ASCE's) Coastal Ocean Port and River Institute (COPRI) sponsored trip to Tsunami ravaged areas will be presented.

The purpose of the COPRI trip was to observe damages to coastal areas and port facilities in Thailand, Sri Lanka and India. The Post - Tsunami assessment trips, were conducted by three teams comprised as follows:

Thailand: David Kriebel and Robert A. Dalrymple

India: Martin Eskijian and David Ames

Sri Lanka: John Headland and Peter Yin

The session will start with the presentation of the 2005 International Coastal Engineering Award by ASCE.

Wednesday 6th, July

Session 3.3: 16:50-18:10

Room E

Indian Ocean plenary session (2)

Chaired by: John Headland

- 217 An Overview of the ITST Expedition to Sri Lanka
Yamada, Fumihiko; Fernandez, H.; Goff, J; Higman, B.; Jaffe, B.
- 218 The December 26, 2004, Indian Ocean Tsunamis: A Reconnaissance Survey Report for the South-East Indian Coast
Yeh, Harry, Peterson, C., Chadha, R.K., Latha, G., Katada, T.
- 219 Field Survey of the Indian Ocean Tsunami in the Maldives
Fritz Hermann M. , Synolakis Costas E.

Thursday 7th, July

Sessions 4.1: 09:00-11:00

Room A	Room B	Room C	Room D
2,1: Wave description models (3)	7,2: Wave propagation numerical models (3)	4,2: Transport and Hydrodynamic in shallow water zones	4,4: Wave effects on structures
Chaired by Carlos Guedes Soares	Chaired by Ignacio Rodríguez	Chaired by Agustín S. Arcilla	Chaired by Dr Martijn de Jong
51 Two-Phase Behaviour of the Spectral Dissipation of Wind Waves <i>Babanin, A.V., Young, I.R</i>	165 Evaluation of the SWAN wave model in slanting fetch conditions <i>Bottema, Marcel, van Vledder, Gerbrant.Ph.</i>	94 Vessel Wake Study: Arthur Kill Channel, New York, USA <i>Alfageme, S., Smith, E., Headland, J.</i>	104 Modification of the Nearshore Hydrodynamic Conditions by a Natural Submerged Breakwater: Northern Crete <i>Ghionis, G., Poulos, S.E., Plomaritis, T.A., Collins, M.B.</i>
53 A new breaking wave parametrization for Boussinesq type equations <i>Cienfuegos, R., Barthélemy, E., Bonneton, P.</i>	166 Validation of a coupling BIEM-Navier-Stokes model for the simulation of solitary wave shoaling and breaking <i>Drevard D., Marcer R., Fraunić P., Rey V., Grilli S.</i>	95 Singular spectrum analysis of storm surge events: the Adriatic Sea case <i>Beltrami Campagnani G. M., Briganti R.</i>	105 Wavelet analysis of pressure measurements near a coastal structure <i>Fritz Hermann M., Synolakis Costas E.</i>
54 A second order Lagrangian model for irrotational irregular waves <i>Fouques, S., Krogstad, H.E., Myrhaug, D.</i>	167 A Wave Propagation Hyperbolic Model Solved by a Finite Characteristics Numerical Technique <i>Matsoukis, P.F.C.</i>	96 Studies on water and suspended sediment transport at the Venice Lagoon inlets. <i>Zaggia, L., Costa, F., Mazzoldi A., Ferla M.</i>	106 Large-Scale Model Study on Cylinder Groups Subject to Breaking and Nonbreaking Waves <i>Sparboom, U., Oumeraci, H., Schmidt-Koppenhagen, R., Grüne, J.</i>
55 Nearshore Modeling using High-Order Boussinesq Equations <i>Lynett, P.</i>	168 An Operational Tool for Wave Regime Characterization and Propagation. Application to the Port of Sines <i>Pinheiro, L.; Fortes, C. J.; Neves, M.G.; Santos, J. A.</i>	97 Hydrodynamics of a moored LNG carrier behind a detached breakwater <i>Wuisman, W.K. and Van der Molen, W.</i>	107 Wave Interaction with Porous Buoy and Porous Membrane Wave Barriers. <i>Kee, S.T.</i>
52 Evaluation of Methods to compute the nonlinear Quadruplet Interactions for deep-water Wave Spectra. <i>Benoit, M.</i>	169 Post Prestige Developments for the Wave Modelling Techniques in the Coastal Environment of Portugal <i>Rusu, E., Soares, C.V.</i>	98 Low frequency free waves induced by a mega-float in random sea <i>Kimura, A and Fujii, H</i>	108 Methods of Estimating Dynamic Wave Forces on Floating Structures. <i>Mets, T.</i>
48 The triplet method for the computation of nonlinear four-wave interactions in discrete spectral wave models <i>Van Vledder, G.Ph.</i>	170 Capabability of different Boussinesq approximations to reproduce wave agitation and second order bounded long wave in real situation. Comparison with measured data <i>García-Mañes, M., Navarro-Saez, A., Benito-Guinea, C., Martín-Soldevilla, M.J</i>		109 Numerical Simulation of Solitary Wave Interaction with Porous Breakwaters <i>Karunarathna S.</i>

Thursday 7th, July

Sessions 4.2: 11.30 to 13.30

Room A	Room B	Room C	Room D
2,1: Waves description models (4)	7,2: Wave propagation numerical models (5)	5,2: Wave Effects in shallow waters	5,1: Coastal damages produced by waves
Chaired by Jurgen Battjes	Chaired by M ^a Jesús Martin S.	Chaired by Antonio Lechuga	Chaired by Carlos Peña
57 Dispersing the Myth of Spectral Bandwidth Parameter in Control of Wave Height Distribution <i>Goda, Y.</i>	171 Influence of foreshore mobility on wave boundary conditions <i>Giarrusso, C.C., Van Gent, M.R.A.</i>	120 Experimental Study On Turbulence Generated by Regular Waves Breaking <i>De Serio, F., Mossa, M.</i>	114 Coastal floodibility <i>Diez, J., Fernández, P.</i>
58 An empirical model for ship-generated waves <i>Kriebel, D and Seelig, W.</i>	172 Simulation of Flexible Vegetation Motion Induced by Water Waves <i>Lima, S. F., Vasco, J. R. G., Neves, C. F., Maciel, G. F., Rosaura, N. M.</i>	121 Modelling of Wave-Driven Sediment Transport in the Shoaling Zone <i>Gilbert, R.W., Grilli, S.T., Zedler, E.A. and Street, R.L.</i>	115 Quadtree meshes for storm surge forecasting <i>Bautista, G. Silva, R.</i>
59 Modeling Long Term Bivariate Distribution of Wave Height, Period and Direction <i>Rodriguez, G., Vega, J.L., González, J., Pacheco, M.</i>	173 The effect of grid size on the sheltering effect of islands in ocean wave models <i>Ponce de León Á. S. and Guedes Soares, C.</i>	122 Wave energy dissipation of waves breaking on a reef with a steep front slope <i>Jensen, M.S., Burcharth, H.F., Broersen, M.</i>	116 Analysis of Coastal Flood Caused by Typhoon 0314(Maemi) and its Catastrophic Damages on a New Harbor Construction Site <i>Chae, J.W., Jeon, K.C., Lee, S.H., Jeong, W.M., So, J.G.</i>
60 Storm Data Analysis for Risk Assessment of Rubble-mound Structures <i>Sousa, I. A.; Pinheiro, L.; Santos, J. A.; Capitão, R.</i>	174 Modelling of undertow profiles at beaches <i>Tomasicchio, G.R., D'Alessandro, F., Aristodemio, F.</i>	123 Verification of Prediction Models for Undertow Profile in the Surf Zone <i>Luck, M., Benoit, M.</i>	117 Discussions on the exceptional tide level in the Venice lagoon in November 2002 <i>Ferla M., Castagna M., Cordella M., Umgiesser G.</i>
33 Requirements for field measurements to improve wave modelling in shallow water <i>Groeneweg, J., Van Vledder, G.Ph., Hordijk, D.</i>	175 Random Wave Transformation Model on Accumulation and Decomposition of Organic Sediment Analysis in Shallow Waters <i>Achiari, H., Sasaki, J.</i>	124 Modeling Wave Climate and Littoral Transport at Virginia Beach, VA <i>Thompson, E., Briggs, M., Painter, D., Smith, J.</i>	118 Depth-Averaged Numerical Model of Flood Inundation Flow Using CIP And SMAC Methods <i>Kawasaki, K., Nakatsujii, K.</i>
	56 Second Order High and Low Frequency Waves in Numerical Simulations <i>Kato, H., Nobuoka, H.</i>	125 An experimental investigation of the hydrodynamic circulation in the presence of submerged breakwaters <i>Lorenzani, C., Piattella, A., Soldini, L., Mancinelli, A., Brocchini, M.</i>	119 The Significance of Tidal Inlets on Open Coast Storm Surge Hydrographs for the East Coast of Florida <i>Salisbury, M.B. and Hagen, S.C.</i>

Poster session		
Monday 4th, July.	Tuesday 5th, July.	Wednesday 6th, July.
<p>1: Wave measurement and analysis</p>	<p>7: Numerical wave models</p>	<p>Indian Ocean Tsunami special session</p>
<p>39 Neural Network Based Validation of Wave Data <i>Van Der Zijpp, N.</i></p> <p>40 Italian sea wave measurement network RON <i>Nardone, G.</i></p> <p>41 Development and Application of Validated Geophysical Ocean Wave Products from ENVISAT ASAR and RA-2 Instruments <i>Johnsen, H.M.</i></p>	<p>200 Hindcasting of Stormy Waves Caused by Typhoon MAEMI Based on WAM Model <i>Shin, S.</i></p> <p>201 Numerical Modeling of Nearshore Wave-Current Interactions Based on Quadtree Grid System <i>Park, K.</i></p> <p>202 Wave Spectrum Assimilation into Numerical Wave Prediction Models: ENVIWAVE Project <i>Morales, G.</i></p> <p>203 Influence of variable Froude number on waves generated by ships in shallow water <i>Torsvik, T.</i></p> <p>204 Wave propagation over a submarine canyon: Model-Data comparison <i>Magne, R.</i></p> <p>205 Linear and Non-linear Wave Model Performance Evaluated with Ponta Delgada Harbour Physical Model Data <i>Mil-Homens, J.</i></p>	<p>229 A Coastal Ocean Prediction System Applied to Cabo Frio <i>Innocentini, V.</i></p> <p>230 Detection of Tsunami Waves by SeaSonde HF Radar <i>Barrick, D.</i></p> <p>231 Interactive Internet Shallow Water Wave Information System in Korea <i>Jun, K.</i></p> <p>232 MeTAS – Mediterranean Tsunami Alert System <i>Bencivenga, M.</i></p>
<p>4: Shallow water waves</p>		<p>2: Theoretical wave description models</p>
<p>110 A Proposed Model for Breaking Waves by Waves – A New Concept <i>Deif, A.</i></p> <p>111 An experimental investigation of the wave growth in a wind flow <i>Ivanova, I.</i></p> <p>112 Hydrodynamic modeling in shallow water with variable friction coefficient <i>Piattella, A.</i></p> <p>113 Soft Shore Protection in Swiss Lakes: Physical Modeling and In-Situ Measurements <i>Müller, B.</i></p>		<p>76 Wave Simulation Of Hurricanes Using Blended Winds From A Parametric Hurricane Wind Model And The CMC Weather Prediction Model. <i>Lalbeharry, R.</i></p>
		<p>8: National and International networking projects</p>
		<p>211 Design Methodology of a Natural Slope Protection Under Wave Attack <i>Loschacoff, C.</i></p>