

**7th International Conference on  
Computer Applications and Information Technology in the Maritime  
Industries**

# **COMPIT 08**

## **PROGRAM** (\*) (on 7<sup>th</sup> March 2008)

*(\*) tentative program - may change*

**Liege, Belgium, 21-23 April 2008**



**Hotel Bedford, 36 Quai Saint Léonard,**

**4000 LIEGE-BELGIUM**

[http://www.anast.ulg.ac.be/COMPIT08/hotel\\_location.php](http://www.anast.ulg.ac.be/COMPIT08/hotel_location.php)

<http://www.bedfordhotelliege.com/location.php>



*With the financial support of the National Funds of Scientific Research of Belgium (FNRS)  
and the University of Liège*

## ■ MONDAY, 21<sup>st</sup> APRIL 2008, Hotel Bedford (1<sup>st</sup> Floor)

### ○ SESSION: Monday 1 - 9:00h – 10:40h

Fernando Alonso, Carlos Gonzalez, Antonio Pinto, Fernando Zurdo  
*Integrated Management of Ship Compartments*

Thomas Brathaug, Jon Olav Holan, Stein Ove Erikstad  
*Representing Design Knowledge in Configuration-Based Conceptual Ship Design*

Tomi Holmberg  
*Comprehensive Structural Design Package for Bulk Carriers*

François-Xavier Dumez, Cedric Cheylan, Sébastien Boiteau, Cyrille Kammerer, Emmanuel Movicato, Thierry Dupau, Volker Bertram  
*A Tool for Rapid Ship Hull Modelling and Mesh Generation*

#### Coffee break

### ○ SESSION: Monday 2 - 11:05-13:00h

Arnulf Hagen, Audun Grimstad  
*Customised Ship Design = Customised Ship Design Environments*

Vidar Vindøy  
*A Functionally Oriented Vessel Data Model Used as Basis for Classification*

Matthias Grau, Markus Sachers, Carsten Zerbst  
*Building the Business Process View into Shipbuilding Data Exchange*

Darko Frank, Alan Klanac, Svemir Bralic  
*A Concept for Concurrent Group Design of Ships*

#### Lunch break

*Ravigote de crevettes roses et tartare de tomates, vinaigrette crémée au safran  
Demi-coquelet sauce Stroganov, lamelles de pommes de terre à l'ancienne  
Profiteroles à la crème fraîche et coulis de chocolat  
Café & two glasses of drinks (wine or softdrink)*

### ○ SESSION: Monday 3 - 14:30h-16:10h

Marc Wilken, Christian Cabos, Wiegand Grafe (Germanischer Lloyd)  
*Using CAD Data for Computation and Assessment of Global Ship Structures*

Rachel Nicholls-Lee, Stephen Turnock, S.W. Boyd (University of Southampton)  
*Simulation-based Optimisation of Marine Current Turbines*

Alban Leroyer, Ganbo Deng, Emmanuel Guilmineau, Patrick Queutey, Michel Visonneau (ECN), Aji Purwanto (NUMECA)  
*Computation for a US Navy Frigate Advancing in Head Waves in Fixed and Free Conditions*

Antti Meksä, Pekka Ruponen, Christopher Ridgewell, Pasi Mustonen (NAPA)  
*Flooding Simulation as a Practical Design Tool*

#### Coffee break

### ○ SESSION: Monday 4 - 16:40h-17:45h

Liming Salvino, Thomas F. Brady (NSWC)  
*Hull Monitoring System Development using a Hierarchical Framework for Data and Information Management*

Christian Cabos, David Jaramillo (Germanischer Lloyd), Philippe Renard (Bureau Veritas)  
*Condition Assessment Scheme – Goals and State of the Art  
Condition Assessment Scheme – IT Tools  
Condition Assessment Scheme – Open Issues*

## Social event sponsored by Bureau Veritas and DN&T

- 18:30 Bus transfer from Hotel Bedford to University of Liege  
 19:00 Welcome  
*Refreshments and light dinner, served continuously*  
 19:15 Bureau Veritas Award  
 19:45 Visit of Towing Tank (2 groups) &  
*Technical presentations of ANAST and DN&T*  
 21:30 Bus back to Hotel Bedford



Alternatively use your own transport to

University - Towing tank - Sart Tilman Parking B52 - Building B52  
 1 chemin des Chevreuils, 4000 Liège

Map : <http://www.anast.ulg.ac.be/main.php?LGID=2&MID=11>



## ■ TUESDAY, 22<sup>nd</sup> APRIL 2008, Hotel Bedford (1st Floor)

### ○ SESSION: Tuesday 1 - 9:00h – 10:40h

Wilfried Abels

*Using a Bridge Simulator during the Early Design-Stage for Evaluation of Ship Design Manoeuvring Ability*

Karl Gunnar Aarsæther, Torgeir Moan

*Autonomous Surrounding Traffic Model for Ship Maneuvering Simulations from Historical Data*

Shinpei Watanabe, Kazuhiro Hasegawa, Philippe Rigo

*Automatic Ship Navigation at Inland Waterway*

Robert G. Hekkenberg

*Development of a Rapid Conceptual Design Method for Inland Ships*

### Coffee break

### ○ SESSION: Tuesday 2 - 11:05-13:00h

Yvonne Masakowski

*Cognition-Centric Systems Design*

Andrea Caiti, Giuseppe Casalino, Alessio Turetta, Riccardo Viviani (ISME)

*Distributed Dynamic Programming for Adaptive On-line Planning of AUV Team Missions with Communication Constraints*

Monique Chyba, Song K. Choi, Thomas Haberkorn, Shashi Singh, Ryan Smith

*Design of Implementable Minimum Energy Consumption Trajectories for a Six Degree of Freedom Autonomous Underwater Vehicle*

Thomas Glotzbach, Matthias Schneider, Peter Otto

*Multi System Mission Control for Teams of Unmanned Marine Vehicles – Software Structure for Online Replanning of Mission Plans*

### Lunch break:

*Frisée aux lardons à la crème de herbe doux*

*Filet de porcelet sauce bourgeoise et lamelles de pommes de terre à l'ancienne*

*Soufflé glacé au Grand Manier*

*Café & two glasses of drinks (wine or softdrink)*

### ○ SESSION: Tuesday 3 - 14:30h-16:10h

David Andrews, L. Casarosa, Richard Pawling

*Interactive Computer Graphics and Simulation in Preliminary Ship Design*

Thomas Gosch, Sandra Schrödter

*SESI – Ship Design and Simulation System*

Cassiano M. Souza (COPPE)

*Shipbuilding Interim Product Identification and Classification System based on Intelligent Analysis Tools*

Charles Forrest

*Development of an Innovative Surface Design Tool*

### Coffee break

#### ○ **SESSION: Tuesday 4 - 16:40h-17:45h**

Jan Tellkamp, Heinz Günther, Stefan Krüger, Dimitris Spanos, Dirk Wittkuhn

*ADOPT – Advanced Decision Support System for Ship Design, Operation and Training – An Overview*

*ADOPT DSS – Ocean Environment Modelling for Use in Decision Support*

*Decision Support for Large Amplitude Roll Motions based on Nonlinear Time-Domain Simulations*

*Onboard Assessment of Seakeeping for Risk-Based Decision Support to the Master*

*ADOPT – Man-Machine Interface and Training*

### GL Award Ceremony

## ■ **WEDNESDAY, 23<sup>rd</sup> APRIL 2008, Hotel Bedford (1st Floor)**

#### ○ **SESSION: Wednesday 1 - 9:00h – 10:40h**

Rowan Van Schaeren, Wout Dullaert, Birger Raa

*Enriching the Berth Allocation Problem and the Quay Crane Allocation Problem*

Carlos V.M. Santos

*Production Simulation Applied to Military Shipbuilding*

Björn Weidemann, Ralf Bohnenberg, Martin -Christoph Wanner

*Process Simulation Based Interactive 3D Shipyard Layout Planning*

Marcus Bentin, Folger Smidt, Steffen Parth

*Process Modelling and Simulation using CAD data and PDM in Early Stage of a Shipbuilding Project*

#### ○ **SESSION: Wednesday 2 - 11:05-13:00h**

Steven J. Deere, Edwin R. Galea, Peter J. Lawrence

*Assessing the Suitability of Ship Design for Human Factors Issues Associated with Evaluation and Normal Operations*

Duperron Marangon-Ribiero (phdsoft)

*3D Graphic Interface for Structure Integrity Management to Achieve Actual Adoption*

Rafael Doig, Patrick Kaeding (TKMS), Michael Kolb (icido)

*Multi-Body Simulation of a Loading Operation*

Yves Le Therisien, Chantal Maïs (DCNS)

*Virtual Reality, a Tool for Assistance in the Design of Complex Systems within Warships*

### Lunch break:

*Tartare de saumon sauce aigrelette*

*Suprême de pintadeau et éventail de mangue, coulis de citron vert monté au beurre et baies roses, galette parmentière*

*Tiramisu Maison*

*Café & two glasses of drinks (wine or soft drink)*

#### ○ **SESSION: Wednesday 3 - 14:30h-16:10h**

Andi Asmara (Merwede Shipyard), Ubald Nienhuis (TU Delft)

*Optimum Routing of Piping in Real Ships under Real Constraints*

Adam J Sobey, J.I.R. Blake, Ajit Sheno (University of Southampton)

*Optimization of Composite Boat Hull Structures*

Jean-David Caprace, Frederic Bair, Nicolas Losseau, Renaud Warnotte, Philippe Rigo (ULG)

*OptiView - A Powerful and Flexible Decision Tool Optimising Space Allocation in Shipyard Workshops*

Takakazu Nakamori (Namura Shipyard), Mitsuru Kitamura, Kunihiro Hamada (Hiroshima Univ)

*Optimization of Arrangement of Longitudinal Members on Shell Plate at Fore and Aft Parts of Ship*

Hao Cui, A. Olcer, Osman Turan (University Strathclyde-Glasgow)  
*An Improved Particle Swarm Optimisation (PSO) Approach in a Multi Criteria Decision Making Environment*

○ **SESSION: Wednesday 4 - 16:40h- 17:45h**

H. Hefazi, Adeline Schmitz (CSU), I. Mizine, G. Boals (CSC Advanced Marine)  
*Multi-Disciplinary Synthesis Design and Optimization for Multi-Hull Ships*

P. Rigo (ULg), D. Dundara (Uljanik), J.L Guillaume-Combecave (Akeryards), S. Domagallo (SNN), A. Klanac (TKK), F. Roland (CMT), O. Turan (NAME), V. Zanic (UZ), A. Amrane, A. Constantinescu, E. Pircalabu (ANAST-ULg)  
*IMPROVE - Design of Improved and Competitive Products using an Integrated Decision Support System for Ship Production and Operation*

Djani Dundara, O. Kuzmanovic (Uljanik), D. Bocchetti (Grimaldi), V. Zanic, J Andric, P. Prebeg (University of Zagreb)  
*Development of a New Innovative Concept of Ropax Ship*

C. Toderan (ULg), J.L. Guillaume-Combecave (Akeryards), M. Bouckaert (EXMAR), A. Hage (DN&T), O. Cartier (Bureau Veritas), J-D Caprace, A. Amrane, A. Constantinescu, P. Rigo (University of Liege- ANAST)  
*Structural Optimization of a 220 000 m<sup>3</sup> LNG Carrier*

Alan Klanac, Matias Niemeläinen, Jasmin Jelovica, Heikki Remes (TKK), S. Domagallo (SSN)  
*Structural Omni-Optimization of a Tanker*

**Dinner Wednesday - 23th April 19:30**

Conference dinner sponsored by Germanischer Lloyd

Domaine de Lintillac  
 Rue Saint-Gilles 25  
 4000 LIEGE, Belgium  
 Tel : +32 42231201

Foie Gras de Canard et sa gelée au Monbazillac  
 Magret de Canard Mulard, pommes sarladaises  
 Coupe Corrèzienne  
 ½ bottle of Monbazillac  
 ½ bottle of mineral water

Transport at own cost; 30 min walk or taxi (5-7 Euro)  
 See map on:

<http://www.anast.ulg.ac.be/COMPIT08/RestoLocation.php>

**CONFERENCE SPONSORS**



**CONTACTS:**

Organiser (for any scientific issues about you paper, conference fees, ...):

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**Scientific Committee:**

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Christian Cabos	GL, Germany	Mike Parsons	NAME UoM, USA
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Carlos Gonzalez	SENER, Spain	Marc Vantorre	Ghent Univ, Belgium
Stein Ove Erikstad	ProNavis, Norway	Bastiaan Veelo	Veelo Consult, Norway
Martha Grabowski	Le Moyne, USA	Leszek Wilczynski	CTO, Poland
André Hage	DN&T-ULg, Belgium	Vedran Zanic	Zagreb Univ, Kroatia