

<b>Auditorium (11h00-12h30)</b>	<b>Room 02.1 (11h00-12h30)</b>
<b>Session: A9:</b> Methods and Tools for Strength Assessment - Fatigue and Fracture II	<b>Session: B9:</b> Structural reliability, safety and environmental protection - Ship Structural Reliability
Structural integrity monitoring index for ship and offshore structures, <i>Bart de Leeuw &amp; Feargal Brennan</i>	Structural reliability of the ultimate hull girder strength of a PANAMAX container ship, <i>Jörg Peschmann, Clemens Schiff &amp; Viktor Wolf</i>
A study on a method for maintenance of ship structures considering remaining life benefit, <i>Yasumi Kawamura, Yoichi Sumi &amp; Masanobu Nishimoto</i>	Sensitivity Analysis of the Ultimate Limit State Variables for a Tanker and a Bulk Carrier, <i>A. W. Husseini &amp; C. Guedes Soares</i>
<i>Lunch (12h30-14h00)</i>	
<b>Auditorium (14h00-15h30)</b>	<b>Room 02.1 (14h00-15h30)</b>
<b>Session: A10:</b> Methods and tools for structural design and optimization	<b>Session: B10:</b> Environmental impact <b>Session B11:</b> Structural Monitoring
Structural design of a medium size passenger vessel with low wake wash, <i>Dario Boote &amp; Donatella Mascia</i>	Assessment of ice-induced loads on ship hulls based on continuous response monitoring, <i>B.J. Leira, Lars Børshøj, Øivind Espeland &amp; J. Amadahl</i>
Multi-objective optimization of ship structures: using guided search vs conventional concurrent optimization, <i>Jasmin Jelovica &amp; Alan Klanac</i>	Structural monitoring of mast and rigging of sail ships, <i>Giovanni Carrera, Cesare Mario Rizzo &amp; Matteo Paci</i>
Digital prototyping of hull structures in basic design, <i>José Varela, Manuel Ventura &amp; C. Guedes Soares</i>	Modelling of environmental impacts of ship dismantling, <i>I.S. Carvalho, P. Antão &amp; C. Guedes Soares</i>
	Fuel consumption and exhaust emissions reduction by dynamic propeller pitch control, <i>Massimo Figari &amp; C. Guedes Soares</i>
<i>End of Conference</i>	

## Conference Schedule

Conference **Welcome Reception** on Sunday, 15th March 2009 at 15h30

**Lunches** will be served daily at the Hotel Holiday Inn between 12h30 and 14h00

**Conference Dinner** on Tuesday, 17<sup>th</sup> March at 20h00

## MARSTRUCT 2009 Conference Secretariat

Centre for Marine Technology and Engineering (CENTEC)

Instituto Superior Técnico

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# MARSTRUCT 2009

## Analysis and Design of Marine Structures

2<sup>nd</sup> International Conference  
on Marine Structures



**Lisbon, 16 - 18 March 2009**

[www.mar.ist.utl.pt/marstruct/marstruct2009](http://www.mar.ist.utl.pt/marstruct/marstruct2009)

# PROGRAMME

Monday, 16<sup>th</sup> March 2009

Instituto Superior Técnico – Congress Centre (Civil Engineering Building)	
Registrations (Hall 01 – 08h00 onwards)	
Opening and Plenary Sessions (Auditorium – 09h00-10h30)	
Interval (10h30-11h00)	
Auditorium (11h00-12h30)	Room 02.1 (11h00-12h30)
<b>Session A1:</b> Methods and Tools for Strength Assessment - Ultimate Strength I	<b>Session: B1:</b> Materials and fabrication of structures - Welded Structures
Discussion of plastic capacity of plating subject to patch loads, <i>Claude Daley &amp; Apurva Bansal</i>	The importance of welding quality in ship construction, <i>Philippa Moore</i>
Ultimate strength characteristics of aluminium plates for high speed vessels, <i>S. Benson, J. Downes &amp; R.S. Dow</i>	A Data Mining Analysis to evaluate the additional workloads caused by welding distortions, <i>Nicolas Losseau, Jean David Caprace, Philippe Rigo &amp; Fernandez Francisco Araiz</i>
Improving the shear properties of web-core sandwich structures using filling material, <i>Jani Romanoff, Aleksi Laakso &amp; Petri Varsta</i>	3D numerical model of austenitic stainless steel 316L multipass butt welding and comparison with experimental results, <i>A.P. Kyriakongonas &amp; V.J. Papazoglou</i>
Lunch (12h30-14h00)	
Auditorium (14h00-15h30)	Room 02.1 (14h00-15h30)
<b>Session A2:</b> Methods and Tools for Strength Assessment - Ultimate Strength II	<b>Session B2:</b> Materials and fabrication of structures - Adhesive Joints
Stability of flat bar stiffeners under lateral patch loads, <i>Jacob Abraham &amp; Claude Daley</i>	Fabrication, testing and analysis of steel/composite DLS adhesive joints, <i>S. Hashim, J. Nisar, N. Tsouvalis, K. Anifantis, P. Moore, I. Chirica, C. Berggreen, A. Orsolini, A. Quispitupu, D. McGeorge, B. Hayman, S. Boyd, K. Misirlis, J. Downes &amp; R. Dow &amp; E. Juin</i>
Ultimate strength of stiffened plates with local damage on the stiffener, <i>M. Witkowska &amp; C. Guedes Soares</i>	The effect of surface preparation on the behaviour of double strap adhesive joints with thick steel adherents, <i>K.N. Anifantis &amp; N.G. Tsouvalis</i>
Approximate method for evaluation of stress-strain relationship for stiffened panel subject to tension, compression and shear employing the finite element approach, <i>Maciej Taczała</i>	Pultrusion characterisation for adhesive joints, <i>J.A. Nisar, S.A. Hashim &amp; P.K. Das</i>
Interval (15h30-16h00)	
Auditorium (16h00-17h30)	Room 02.1 (16h00-17h30)
<b>Session: A3:</b> Methods and Tools for Strength Assessment - Ultimate Strength III	<b>Session: B3:</b> Materials and fabrication of structures - Buckling of Composite Plates
Residual strength of damaged stiffened panel on double bottom ship, <i>Zhenhui Liu &amp; Jorgen Amdahl</i>	Studies of the buckling of composite plates in compression, <i>B. Hayman, C. Berggreen, C. Lundsgaard-Larsen, A. Delarche, H. L. Tøftegaard, R.S. Dow, J. Downes, K. Misirlis, N. Tsouvalis &amp; C. Douka</i>
Assessment of the hull girder ultimate strength of a bulk carrier using nonlinear finite element analysis, <i>Zhi Shu &amp; Torgeir Moan</i>	Buckling strength parametric study of composite laminated plates with delaminations, <i>N.G. Tsouvalis &amp; G.S. Gaganidis</i>
Ultimate strength performance of Suezmax tanker structures: Pre-CSR versus CSR designs, <i>J.K. Paik, D.K. Kim &amp; M.S. Kim</i>	Buckling behaviour of the ship deck composite plates with cut-outs, <i>Ionel Chirica, Elena-Felicia Beznea &amp; Raluca Chirica</i>
	Buckling behaviour of plates with central elliptical delamination, <i>Elena-Felicia Beznea, Ionel Chirica &amp; Raluca Chirica</i>

Tuesday, 17<sup>th</sup> March 2009

Registrations (Hall 01 – 08h30 onwards)	
Auditorium (09h00-10h30)	
<b>Session: A4:</b> Methods and Tools for Strength Assessment - Finite element analysis I	<b>Session: B4:</b> Methods and Tools for Strength Assessment - Coatings and Corrosion I
Methods for hull structure strength analysis and ships service life evaluation, for a large LNG carrier, <i>Leonard Domnisoru, Ionel Chirica &amp; Alexandru Ioan</i>	Large scale corrosion tests, <i>Pawel Domzalicki, Igor Skalski, Yordan Garbator &amp; C. Guedes Soares</i>

Parametric investigation on stress concentrations of bulk carrier hatch corners, <i>Dario Boote &amp; Francesco Cecchini</i>	Anticorrosion protection systems – improvements and continued problems, <i>Anders Ulfverson &amp; Klas Vikgren</i>
A study on structural characteristics of the ring-stiffened circular toroidal shells, <i>Qing-hai Du, Zheng-quan Wan &amp; Wei-cheng Cui</i>	Prospects of application of plasma electrolytic oxidation coatings for shipbuilding, <i>Alexander Minay, Natalie Gladkova, Sergey Gnedonkov &amp; Vladimir Goraynov</i>
Interval (10h30-11h00)	
Auditorium (11h00-12h30)	Room 02.1 (11h00-12h30)
<b>Session: A5:</b> Methods and Tools for Strength Assessment - Finite element analysis II	<b>Session: B5:</b> Methods and Tools for Strength Assessment - Coatings and Corrosion II
Application developments of mixed finite element method for fluid-structure interaction analysis in maritime engineering, <i>Jing Tang Xing, Ye Ping Xiong &amp; Mingyi Tan</i>	Corrosion wastage statistics and maintenance planning of corroded hull structures of bulk carriers, <i>Yordan Garbator &amp; C. Guedes Soares</i>
Efficient calculation of the effect of water on ship vibration, <i>Mark Wilken, G. Of, C. Cabos &amp; O. Steinback</i>	Numerical simulation of strength and deformability of steel plates with surface pits and replicated corrosion-surface, <i>Md. Mobesher Ahmmad &amp; Yoichi Sumi</i>
Finite element simulations of ship collisions: a coupled approach to external dynamics and inner mechanics, <i>Ingmar Pill &amp; Kristjan Tabri</i>	Effect of pitting corrosion on the collapse strength of rectangular plates under axial compression, <i>S. Saad-Eldeen &amp; C. Guedes Soares</i>
Lunch (12h30-14h00)	
Auditorium (14h00-15h30)	Room 02.1 (14h00-15h30)
<b>Session: A6:</b> Methods and Tools for Loads and Load Effects I	<b>Session: B6:</b> Methods and Tools for Strength Assessment - Impact Strength
A study on the effect of heavy weather avoidance on the wave pressure distribution along the midship transverse section of a VLCC and a bulk carrier, <i>Zhi Shu &amp; Torgeir Moan</i>	Impact behaviours of GRP, aluminium and steel plates, <i>L.S. Sutherland &amp; C. Guedes Soares</i>
Comparison of experimental and numerical sloshing loads in partially filled tanks, <i>S.Brzegiolaru, L.Sario, M.Viviani, Y.Chen, P.Temarel, N.Couty, S.Hoflack, L.Diebold, N. Moird &amp; A.Souto Iglesias</i>	Impact damage of MARK III type LNG carrier cargo containment system due to dropped objects: An experimental study, <i>J.K. Paik, B.J. Kim, S.H. Kim, M. K. Ha, Y. S. Sub &amp; S. E. Chun</i>
Experiments on a damaged ship section, <i>T.W.P Smith, K.R. Drake &amp; P. Wrobel</i>	Simulation of the response of double bottoms under grounding actions using Finite Elements, <i>I. Zilakos, M. Toullos, M.S. Samuelides, T.-H. Nguyen &amp; J. Amdahl</i>
Interval (15h30-16h00)	
Auditorium (16h00-17h30)	Room 02.1 (16h00-17h30)
<b>Session: A7:</b> Methods and Tools for Loads and Load Effects II	<b>Session: B7:</b> Methods and Tools for Strength Assessment - Fire and explosion
Estimation of parametric rolling of ships - comparison of different probabilistic methods, <i>Jelena Vidic-Perunovic &amp; Jorgen Juncker Jensen</i>	CFD simulations on gas explosion and fire actions, <i>J.K. Paik, B.J. Kim, J. S. Jeong, S.H. Kim, J.S. Jang, G. S. Kim, J. H. Woo, Y. S. Kim, M. J. Chun, Y. S. Shin &amp; J. Czajko</i>
Local hydro-structure interactions due to slamming, <i>S. Malenica, F.X. Sireta, S. Tomasevic, J. Tuitman &amp; I. Schipperen</i>	The effects of reliability-based vulnerability requirements on blast-loaded ship panels, <i>S.J. Pabos &amp; P.K. Das</i>
Conference Dinner – 20h00	

Wednesday, 18<sup>th</sup> March 2009

Registrations (Hall 01 – 08h30 onwards)	
Auditorium (09h00-10h30)	
<b>Session A8:</b> Methods and Tools for Strength Assessment - Fatigue and Fracture I	<b>Session: B8:</b> Structural reliability, safety and environmental protection - Still water loads
Fracture mechanics procedures for assessing fatigue life of window and door corners in ship structures, <i>Mika Bäckström &amp; Seppo Kirjavu</i>	Probabilistic presentation of the total bending moments of FPSO's, <i>Ljubomir D. Ivanov, Albert Ku, Beiqing Huang &amp; Viviane C. S. Krzynkala</i>
Experimental and numerical fatigue analysis of partial-load and full-load carrying fillet welds at doubler plates and lap joints, <i>O. Feltz &amp; W. Fricke</i>	Stochastic model of the still water bending moment of oil tankers, <i>L. Garré &amp; Enrico Rizzuto</i>
Global strength analysis of ships with special focus on fatigue of hatch corners, <i>Hubertus von Selle, Olaf Doerk &amp; Manfred Scharrer</i>	Statistics of still water bending moments on double hull tankers, <i>Joško Parunov, Marin Čorak &amp; C. Guedes Soares</i>
Interval (10h30-11h00)	