

SUNDAY 8th MARCH 2015

18:00 – 20:00 ICEBREAKER & REGISTRATION
VOR Marquee, Hobson Wharf

MONDAY 9th MARCH 2015

08:00 – 09:00 REGISTRATION
Marine Events Centre

09:00 – 09:30 OPENING SESSION (Chair – Graeme Finch)
Conference Opening and Official Welcome
Opening Addresses

09:30 – 10:15 KEYNOTE ADDRESS
Burns Fallow, North Sails NZ

10:15 – 10:45 MORNING BREAK

10:45 – 12:15 SESSION 1: WING SAILS - I (Chair – Peter Richards)
A CFD-based Wingsail Optimisation Method Coupled to a VPP
Ignazio Maria Viola, Marco Biancolini, Matthieu Sacher, Ubaldo Cella
Aerodynamic Optimisation Study on a Rigid 2D Wing Sail in a Wind Tunnel
Frederic Danbon, Dimitri Voisin & Michel Desjoyeaux
Aerodynamic Design Development of AC72 Wings
Steve Collie, Burns Fallow, Nick Hutchins & Harold Youngren

12:15 – 13:15 LUNCH

13:15 – 14:15 SESSION 2: WING SAILS - II (Chair – Burns Fallow)
Numerical Prediction of Stall on a Two-Elements Wingsail
Vincent Chapin , Nicolas Gourdain , Nicolas Verdin , Alessandro Fiumara & Julien Senter
Evaluation of Multi-element Wing Sail Aerodynamics from Two-Dimensional Wind Tunnel Investigations
Alex Blakely, Richard Flay, Hiroyuki Furukawa & Peter Richards

14:15 – 14:45 AFTERNOON BREAK

14:45 – 16:45 SESSION 3: AERODYNAMICS - I (Chair – Heikki Hansen)
Offwind Sail Flying Shape Detection
Fabio Fossati, G. Mainetti, M Malandra, P. Schito & A. Vandone
J70 Sail and Rig Tune Aerodynamic Study
Connor Anderson, Duncan Swain, Tyler Doyle & Margot Gerritsen
Development of a Directional Load Cell to Measure Flying Sail Aerodynamic Loads
David Le Pelley, Peter Richards & Arthur Bethier
An Investigation of the Dynamic Behaviour of Asymmetric Spinnakers at Full-Scale
Dario Motta, Richard Flay, Peter Richards, David Le Pelley, Patrick Bot & Julien Deparday

19:00 – 21:00 PUBLIC DESIGN SESSION (Chair – Graeme Finch)
VOR Marquee, Hobson Wharf
Knut Frostad talks about the design of the VO65 and the Volvo Ocean Race

TUESDAY 10th MARCH 2015

- 09:00– 10:30** **SESSION 4: STRUCTURES - I** **(Chair – Mark Battley)**
Effect of Curvature on Slamming Loads
John Weber, Raj Das & Mark Battley
New Fatigue Test Method for Structural Foams
Raphael Gerard, Jamal Fajoui, Fahmi Alila, Frederic Jacquemin & Pascal Casari
Characterisation of the Processing Properties of Out-of-Autoclave Prepregs
Chris Hickey & Simon Bickerton
- 10:30 – 11:00** **MORNING BREAK**
- 11:00 – 12:30** **SESSION 5: STRUCTURES - II** **(Chair – Susan Lake)**
Slamming Induced Failures of Polymeric Foam Cores
Mark Battley & Tom Allen
Quantification of Hydroelasticity in Water Impacts of Flexible Composite Hull Panels
Tom Allen & Mark Battley
Exploratory Study on the Flutter Behaviour of Modern Racing Yacht Keels
Luc Mouton & Alon Finkelstein
- 12:30 – 13:30** **LUNCH**
- 13:30 – 14:30** **SESSION 6: PERFORMANCE** **(Chair – Lars Larsson)**
High Performance Sailing in Olympic Classes – A Research Outlook and Proposed Directions
Christian Finnsgård, Lars Larsson, Torbjörn Lundh & Matz Brown
Strategic Decision Making in Yacht Match Racing: Stochastic Game Approach
Lamia Belouaer, Patrick Bot & Mathieu Boussard
- 14:30 – 15:00** **AFTERNOON BREAK**
- 15:00 – 16:00** **SESSION 7: DESIGN** **(Chair – David Le Pelley)**
Some Ideas about Modelling and Time Series
Miro Lozej
Lutra80 Singularity: The OpenFoam Hydrodynamics and the MARIN tank test
Oleg Gulinsky, Andrey Rogatkin & Vadim Vorobyov
- 16:00 – 16:30** **VOLVO OCEAN RACE PRESENTATION**
Load Monitoring on the Volvo Ocean Race Fleet
Paolo Manganeli, Tony Chignell, Richard Acland
- 19:30 onwards** **Conference Dinner**
Royal New Zealand Yacht Squadron, Westhaven Marina.

WEDNESDAY 11th MARCH 2015

- 09.30 – 10:30** **SESSION 8: FOILS - I** **(Chair – Patrick Bot)**
Fluid Structures Interaction of High Performance Catamaran C-Foils Under Load
Laura Marimon, J. Banks, S.W. Boyd & S.R. Turnock
Flight Dynamics of Sailing Foilers
Peter Heppel
- 10:30 – 11:00** **MORNING BREAK**
- 11:00 – 12:30** **SESSION 9: FOILS – II** **(Chair – Ignazio Maria Viola)**
Performance Assessment and Optimisation of a C-Class Catamaran Hydrofoil Configuration
Agathe Paulin, Heikki Hansen, Karsten Hochkirch & Martin Fischer
Experimental Analysis of Hydroelastic Response of a Flexible Foil for Sailing Applications
Jacques André Astolfi, Alexandra Lelong, Patrick Bot & Jean-Baptiste Marchand
6 dof Simulation for Stability Analysis of a Foiler Towed by Kite
Nedeleg Bigi, K. Roncin, J-B. Leroux, R. Leloup, C. Jochum & Y. Parlier
- 12:30 – 13:30** **LUNCH**
- 13:30 – 15:00** **SESSION 10: AERODYNAMICS – II** **(Chair – Stuart Norris)**
Sail Trimming FSI Simulation – Comparison of Viscous and Inviscid Flow Models to Optimise Upwind Sail Trim
Matthieu Sacher, Frederic Hauville, Patrick Bot & Mathieu Durand
RANSE-CFD Simulation of Rigid Multiple Sails
Patrick Queutey, Emmanuel Guilmineau, Jeroen Wackers & Michel Visonneau
Aerodynamics of Headsails: A Review of Measured Surface Pressures and Expected Flow Fields
Ignazio Maria Viola & Richard Flay
- 15:00 – 15:30** **AFTERNOON BREAK**
- 15:30 – 17:00** **SESSION 11: HYDRODYNAMICS** **(Chair – Richard Flay)**
Hydrodynamic Spects of Transom Stern Optimization
Michal Orych & Lars Larsson
Sailing Yacht Transom Sterns – A Systematic CFD Investigation
Jens Allroth, Ting-Hua Wu, Michal Orych & Lars Larsson
RANS Based VPP for Mega-Yachts
Tyler Doyle & Bradford Knight
- 17:00 – 17:15** **CLOSING REMARKS**

ORGANISING COMMITTEE

Mr Graeme Finch, Finch & Associates (Chair)
Dr Mark Battley, University of Auckland
Burns Fallow, North Sails NZ
Prof. Richard Flay, University of Auckland
Mrs Susan Lake, Core Builders Composites

Mr David Le Pelley, University of Auckland
Ms Helen Queckett, RINA NZ
Dr Stuart Norris, University of Auckland
Assoc. Prof. Peter Richards, University of Auckland
(Tech. Chair)

