

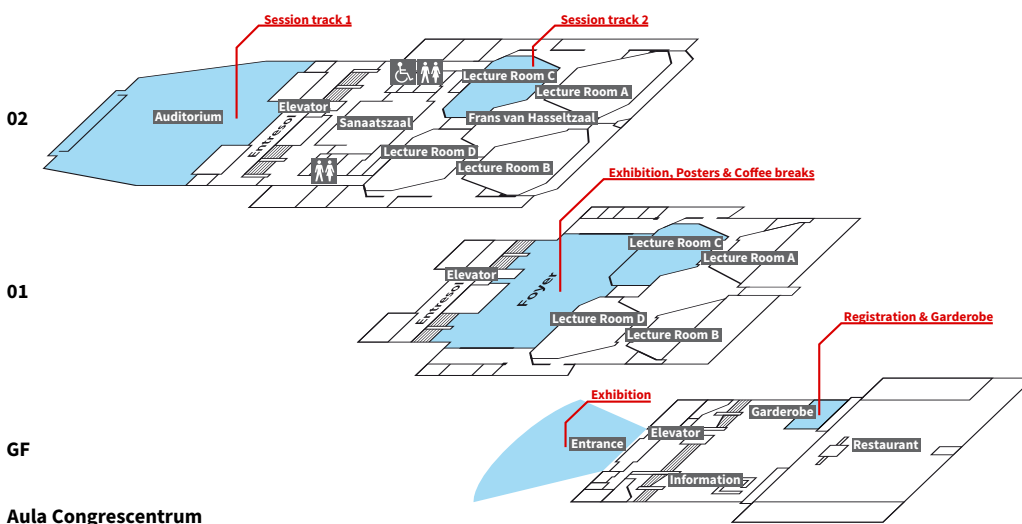
Monday, 15 June 2015

Time	Aula Congrescentrum	
08:30 - 09:30	Registration - Registration Desk	
	Auditorium	
09:30 - 10:00	Welcome Notes - Conference Opening Dr. Roland Schmehl , Associate Professor, Faculty of Aerospace Engineering, TU Delft Prof. Dr. Gerard Van Bussel , Chairholder Wind Energy, Faculty of Aerospace Engineering, TU Delft Prof. Dr. Hester Bijl , Dean, Faculty of Aerospace Engineering, TU Delft	
	Auditorium	Lecture Room C
10:00 - 10:25	Session: Industry Highlights Damon Vander Lind , Makani Power Developing a 600 kW Airborne Wind Turbine	
10:25 - 10:50	Michiel Kruijff , Ampyx Power Status and Development Plan of the Powerplane of Ampyx Power	
10:50 - 11:15	Alexander Bormann , EnerKite Global Economy of Airborne Wind Energy and our Path Towards a Market-Ready Technology	
11:15 - 11:35		Coffee
11:35 - 11:55	Session: Regulation and Wind Environment Richard Ruiterkamp , Ampyx Power Update on Certification and Regulations of Airborne Wind Energy Systems - The European Case for Rigid Wings	Session: Modelling, Simulation and Control (Rigid Wing) Alain de Solminihac , ENSTA Bretagne Kite as a Beam - An Analytical 3D Kite Tether Model
11:55 - 12:15	Ben Glass , Altaeros Energies A Review of Wind Standards as they Apply to Airborne Wind Turbines	Damian Aregger , FHNW Hardware in the Loop Testing for Autonomous Airborne Wind Energy Systems
12:15 - 12:35	David Brandt , EWC Weather Consult GmbH Adapting Wind Resource Estimation for Airborne Wind Energy Converters	Moritz Diehl , University of Freiburg Simulation Results and Software Architecture of a Rotating Launch System for a Tethered Aircraft
12:35 - 12:55	Ilona Bastigkeit , Fraunhofer IWES Study on Wind Resources at Mid-Altitude	Henrik Hesse , ETH Zürich Autonomous Pumping Cycles for Tethered Wings
12:55 - 13:50		Lunch
13:50 - 14:10	Session: Implemented Concepts I Thomas Harklau , Kitemill Kitemill, a Driver of Second-Generation Wind Energy!	Session: Control and Optimisation Curran Crawford , University of Victoria To Fly a Kite, Glider or Prop Wing?
14:10 - 14:30	Rolf Luchsinger , TwingTec AG Closing the Gap: Pumping Cycle Kite Power with Twings	Christoph Hackl , Technische Universität München DC-link Control for Airborne Wind Energy Systems During Pumping Mode
14:30 - 14:50	Tiago Parda , Omnidea Analysis of Experimental Data of a Hybrid System Exploiting the Magnus Effect for Energy from High Altitude Wind	Sanket Sanjay Diwale , EPFL Predictive Control of an Airborne Wind Energy System using Gaussian Process Models
14:50 - 15:10	Bjarke Kronborg , eWind Solutions eWind Solutions Company Overview and Major Design Choices	Ramiro Saraiva , Federal University of Santa Catarina Online Parameter Estimation for Flight Control of Tethered Airfoils
15:10 - 15:30	Lukas Braun , Enevate Preparing the Road for 24 Hours Flight Operation of a Pumping Kite Power System	Marcelo De Lellis , Federal University of Santa Catarina On the Optimisation of Pumping Kites for Wind Power
15:30 - 15:50		Coffee
15:50 - 16:15	Session: Business Development Matthew Doe , TU Delft How to Introduce Kite-Based Airborne Wind Energy Systems - The Selection of Niche Strategies to Overcome Barriers to Adoption	Session: Modelling, Simulation and Control - Soft Wing I Roland Schmehl , TU Delft Traction Power Generation with Tethered Wings - A Quasi-Steady Model for the Prediction of the Power Output
16:15 - 16:40	Wolbert Allaart , Ampyx Power Ampyx Power Market Development	M Prabu Sai Manoj , IIT Madras Quasi-Steady Fluid Structure Interaction Model of the Surf Kite
16:40 - 17:05	Gordon Planes , T'Sou-Ke First Nation Harvesting the Wind - A Canadian First Nations Perspective	Julius Berens , TU Delft Dynamic Nonlinear Aeroelastic Behaviour of Flexible Wings in an Airflow
17:05 - 17:30	Corey Houle , Twingtec AG Mobile Wind Farms Using Tethered Wings - Technical and Economic Considerations	Jelte Van Til , TU Delft Dynamic Model of a Bridled Kite Including Rotational Deformations
17:30 - 19:30	Closing Remarks of the Day and Free Time	
19:30 - 23:00	Dinner at Art Center Delft, with screening of AWE documentary	

Sponsors:

Tuesday, 16 June 2015

Time	Auditorium	Lecture Room C
09:30 - 09:50	Session: Finance and Networking Bryan Roberts (via video link) Quad-Rotorcraft to Harness High Altitude Wind Energy	
09:50 - 10:10	Guido Lütsch , HWN500 Network Airborne Wind Energy Network HWN500 – Shouldering R&D in Co-Operations	
10:10 - 10:30	Roland Schmehl , TU Delft The AWESCO Initial Training Network – Addressing the Key Engineering Challenges of Airborne Wind Energy	
10:30 - 10:50	Udo Zillmann , Daidalos Capital The Trillion Dollar Drone – A Change of Perspective	
10:50 - 11:10	Chris Vermillion , UNC Charlotte Development of a Micro-Scale Closed-Loop Testing Framework for Airborne Wind Energy Systems – A Case Study in University/Industrial Collaboration	
11:10 - 11:30		Coffee
11:30 - 11:50	Session: Materials and Implemented Concepts II Emre Dikmen , Kontra Engineering Design Considerations and Control Implementation for a Two-Tethered Kite-Based Airborne Wind Energy System	Session: Modelling, Simulation and Control – Soft Wing II Adrian Gambier , Fraunhofer IWES Recovery Phase Analysis of a Pumping Kite Wind Generator
11:50 - 12:10	Alfred Van den Brink , E-Kite Design of the e-50 Ground Station	Michael Erhard , SkySails Automatic Control of Optimal Pumping Cycles in Airborne Wind Energy
12:10 - 12:30	Tobias Schneiderheinze , TU Chemnitz High Performance Ropes and Drums In Airborne Wind Energy Systems	Uwe Fechner , TU Delft Flight Path Planning in a Turbulent Wind Environment
12:30 - 12:50	Joep Breuer , Airborne Technology Centre Composites Manufacturing for Airborne Wind Energy	Reinhart Paelinck , FlySurfer Kiteboarding R&D High-Performance Soft Kite Technology State of the Art, Limits and Opportunities
12:50 - 13:10	Ingo Berbig , TU Chemnitz Development of Multi-Functional Narrow Fabric as Tension Member for Winch Operations	Stefan Wilhelm , Hamburg University of Technology Life Cycle Assessment of Electricity Production from an Airborne Wind Energy System
13:10 - 14:15		Lunch Poster Session (Foyer) Group Photo
14:15 - 14:35	Session: Concept and Design Florian Bauer , Technische Universität München On Multicopter-Based Launch and Retrieval Concepts for Lift Mode Operated Power Generating Kites	Session: Modelling, Simulation and Experiments Ahmad Hably , Gipsa-Lab Éoliennes Volantes: Airborne Wind Energy Activities at the Gipsa-Lab
14:35 - 14:55	Stephan Schnez , ABB Switzerland Ltd The Take-Off of an Airborne Wind Energy System Based on Rigid Wings	Antonello Cherubini , Scuola Superiore Sant'Anna Modelling and Design of Off-Shore Floating Platform for High Altitude Wind Energy Converters
14:55 - 15:15	Moritz Diehl , University of Freiburg Multiple Wing Systems – an Alternative to Upscaling?	Nedeleg Bigi , ENSTA Bretagne A Quasi-Analytical 3D Kite Tether Model
15:15 - 15:35	Gabor Dobos , Chemotronik Kft. (via video link) Identified Flying Object – IFO: an Untethered Airborne Wind Energy System	Maximilian Ranneberg , EnerKite Estimation, Optimisation and Validation of Power Curves for Airborne Wind Energy
15:35 - 15:55	Björn Renneisen , TU Berlin On Image Interpretation for Position Detection of Kites	Evangelos Ploumakis , TU Delft Enhanced Kinetic Energy Entrainment in Wind Farm Wakes – LES Study of a Wind Turbine Array with Tethered Kites
16:00 - 16:15		Closing Remarks



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