

OFFSHORE WIND

R&D Conference 2018

- Conference Program (as at October 05th) -



Wednesday, 14 November 2018

9.30 a.m.	Registration	
10 - 11 a.m.	Welcome Coffee	
11 a.m. - 1 p.m.	Opening, Words of Welcome & Plenary session	
1 - 2 p.m.	Lunch	
2 - 3.45 p.m.	Operation and maintenance I Chair: Raimund Rolfes (ISD - Leibniz University Hannover), Jan Wenske (IWES) Investigation of Degradation Processes in Large-scale Experimental Tests by Structural Health Monitoring Techniques and Numerical Simulations Martin Kohlmeier et al. (IWES, Wölfel Engineering GmbH +Co. KG) #16239 Damage detection in offshore wind turbine grouted connection by nonlinear harmonic identification Nathalie Müller et al. (University of Nantes, IWES, University of Bochum) #16233 Offshore Wind Farm Clustering for Design and Monitoring Operating Loads by Means of a Response Surface-based Clustering Approach and Metaheuristic Optimization Andreas Ehrmann, Christian Guillermo Gebhardt, Raimund Rolfes (Leibniz University, ForWind) #16269 Estimation of 1 Hz Distribution based on 10.min SCADA Data Björn Roscher, A. Werkmeister, R. Schelenz (RWTH Aachen) #16012 Monitoring of Blade Bearings Wolfgang Losert, Beate Burkhardt (eolotec) #16235	Resource assessment I Chair: Stefan Emeis (KIT), Julia Gottschall (IWES) A methodology review of uncertainty estimation in wind resource and power performance assessments when using LIDARs Brian Gribben et al. (Frazer-Nash Consultancy, IWES, ORE, DTU) #16734 Progressing commercial acceptance of floating LiDAR devices with an updated roadmap Marie-Anne Cowan et al. (DNV GL, IWES, Frazer Nash Consultancy, MULTIVERSUM, Carbon Trust) #16255 First lightship-based wind lidar measurement in the North Sea Beatriz Canadillas et al. (UL International): #16337 Impact of atmospheric stability on offshore windpark wakes in the German Bight as observed by X-band and C-band Synthetic Aperture Radar Bughsin Djath, Johannes Schulz-Stellenfleth (HZG) #16250 On the use of remote sensing measurements for very short-term forecasting of offshore wind power Laura Valldecabres Sanmartin, Martin Kühn (ForWind) #16298
3.45 - 4.15 p.m.	Coffee Break	
4.15 - 5.30 p.m.	Operation and maintenance II Chair: Raimund Rolfes (ISD - Leibniz University Hannover), N.N. Load prediction by stochastic model in Global Tech I Pyei Phyto Lin et al. (ForWind, Global Tech I) #16196 Project Leikline Phase 2 – Power Curve Estimation in Offshore Wind Farms under Waked Conditions David Bastine et al. (IWES) #16244 Improving the Monitoring of Offshore Wind Power Plants by Integrating Contextual Information from Lifecycle Records Steffen Dienst, Johannes Schmidt, Jonas Beseler (University of Leipzig, Global Tech I) #15999 Control methods for lifetime extension Vasilis Pettas, Po Wen Cheng (University of Stuttgart) #16063	Resource assessment II Chair: Stefan Emeis (KIT), Julia Gottschall (IWES) Development of an offshore wind index for the German Bight from mesoscale simulation data of over a decade Martin Dörenkämper et al. (IWES, ForWind) #16266 Rain and wind conditions at offshore wind farms Charlotte Hasager et al. (DTU Wind Energy) #15994 Models and perspectives of wake dynamics and turbulence Matthias Wächter et al. (ForWind) #16195 Wind turbine wakes in stable atmospheric boundary layers Philip Hancock, Paul Hayden (University of Surrey) #16316
7 p.m.	Klimahaus: Conference dinner & networking event	

www.offshore-wind-rd.de



*changes reserved



9.00 - 10.15 a.m.

Operation and maintenance III

Chair: Raimund Rolfes (ISD - Leibniz University Hannover), N.N.

Offshore TIMES – analysis and optimization of O&M concepts for offshore wind farms

Gerrit Wolken-Möhlmann (IWES) #16342

Route Optimization for Offshore Maintenance Tasks & Case Study

Darja Döhle, G. Wolken-Möhlmann, M. M. Wiggert (IWES) #16341

An approach to assessing mechanical fatigue of dynamic subsea cables for floating offshore wind turbines

David Young et al. (ORE Catapult, University of Strathclyde, University of Edinburgh, University of Exeter) #16237

Risk Assessment and command staff exercises as method to reduce vulnerability of offshore wind farms

Uwe Arens, Uta Kühne (University of Applied Sciences Bremerhaven, ISaSS, fk-wind: Institut für Windenergie) #16249

Foundations & support structures I

Chair: Martin Kohlmeier (IWES),
Matthias Baeßler (BAM)

Effects of the Support Structure Design on the Economic Viability of Offshore Wind Projects: an Interdisciplinary Analysis

Clemens Hübler et al. (Leibniz University, ForWind) #16011

Impact of Foundation Selection on Wind Turbine Design and Operations

Daniel Kuchma (Tufts University) #16731

Numerical design concept for submerged, axially loaded grouted connections

Joshua Henneberg, Peter Schaumann, Alexander Raba (Leibniz University Hannover, ForWind) #16262

PREON®marine: Foundation system based on SEALENCE-project

Andreas Lammers, Alexander Schenk, Kirill A. Schmoor (Vallourec Deutschland GmbH, Fraunhofer IWES, Institute for Geotechnical Engineering) #16335

10.15 - 10.45 a.m. Coffee Break

10.45 - 12 a.m.

Test facilities & demonstration sites

Chair: Thomas Neumann (DEWI),
Jan Tessmer (DLR)

A practical way of high level torque calibration for the wind turbine nacelle test

Hongkun Zhang, Martin Pilas (IWES) #16227

On-site test of components and sensors exposed to marine degradation processes: fatigue, corrosion and biofouling

Franck Schoefs, Hamed Ameryoun (University of Nantes, Capacités) #16767

Reliable main and blade bearing technology

Jörg Rollmann et al. (Thyssen Krupp) #17461

Recent developments at FINO1

Juan Jose Trujillo et al. (UL) #16343

Foundations & support structures II

Chair: Martin Kohlmeier (IWES),
Matthias Baeßler (BAM)

Vibratory pile driving and lateral stiffness of monopiles

Jens Wiemann, Jan Fischer (Fichtner Water & Transportation GmbH) #16247

Improvement of the Bearing Capacity of Offshore Pile Foundations

Matthias Baeßler et al. (BAM, TU Hamburg) #16246

Optimization of Jacket Substructures Considering Detailed Cost and Load Assumptions

Jan Häfele, Christian Guillermo Gebhardt, Raimund Rolfes (Leibniz University) #16013

A Modular TLP-Design for Offshore Wind Turbines

Daniel Walia et al. (University of Rostock, Gicon Holding GmbH) #15593

12 a.m. - 1 p.m. Lunch

1 - 2 p.m. Postersession

2 - 3 p.m.

Environmental impact and spatial planning

Chair: Kristin Blasche (Orsted), N.N.

Noise mitigation in German offshore wind construction since 2014 – practical experience and influence of pile driving on harbour porpoise

Eva Philipp (Vattenfall, on behalf of the AGOW working group Environmental protection) #15616

Adaptive approach to environmental monitoring for UK offshore wind projects

Sally Holroyd, Tina Bendixen (Orsted): #16000

MARLIN - a large scale/high resolution information system as a backbone for marine management

Gregor von Halem et al. (BSH, HZG, AWI) #16194

Installation and decommissioning

Chair: Arndt Hildebrandt (University of Hannover),
Martin Ros (EON)

Comparison of weather risk assessment methods

Tamara Brüchmann, Marcel Wiggert (IWES) #16340

The BLUE Hammer, Noise mitigation at source level

Jasper Winkes (Fistuca BV) #16251

Offshore monopile decommissioning on a scaled basis

Nils Hinzmann, Philipp Stein, Jörg Gattermann (TU Braunschweig) #16242

3 - 3.30 p.m. Coffee Break

3.30 - 5 p.m.

Geology, waves & current measurements

Chair: Kai Herklotz (BSH), N.N.

Boulder detection – Application of hydro-acoustic methods for the detection of buried objects in the sea floor in the course of the planning of offshore wind farms

Jan Hebig, Carlos Ramos Cordova (IWES) #16338

New methods to detect extreme waves in quality controlled in-situ measurements

Mayumi Wilms, Kai Herklotz (BSH) #16009

Findings on scouring and wind-wave correlation for OWEC design recommendations and offshore operations

Arndt Hildebrandt et al. (Leibniz University) #16223

Innovative measurement technologies for met-ocean and soil conditions

Bernhard Lange et al. (IWES, University of Bremen) #16323

Offshore wind turbines & components

Chair: Martin Kühn (ForWind),
Po Wen Cheng (University of Stuttgart)

Improvement of aerodynamic blade design tools by means of advanced CFD

Hamid Rahimi et al. (IWES, ForWind) #16241

Integration of Thermoplastic/Metallic Erosion Shields into Wind Turbine Blades to Combat Leading Edge Erosion

Robbie Herring et al. (University of Bristol, ORE, National Composites Centre) #16243

The Future of Main Bearing Technology not only for Multi MW applications

Bernd Lüneburg et al. (Thyssen Krupp, IME Aachen GmbH, ITR) #17462

Accurate life prediction tool for wind turbines

Adrijan Ribaric, Juan Callego-Calderon (Sentient Science) #16213

5 - 5.15 p.m. Closing Session