May 25 (day 1) – all times w.r.t. Central European Summer Time (CEST)

Session title (white text = mini-symposium | black text = regular session) **Session chairs**

	1 early time slot **Tue | 13:40 - 15:20**	**2** intermed. time slot **Tue | 15:30 - 17:10**	**3** late time slot **Tue | 17:20 - 19:00**
1	**Wind resource assessment (I)** **Doron Callies, NN**	**High-fidelity wake modeling** **Xiaoli Larsén, NN**	**Wind resource assessment (II)** **Lukas Pauscher, NN**
2	**Wind Power Forecasting (I)** **NN, NN**	**Wind Power Forecasting (II)** **NN, NN**	**Wind farm design and optimization** **Johan Meyers, NN**
3	**Advances in Lattice Boltzmann Methods in Wind Energy** **Stefan Ivanell, Henrik Asmuth**	**Array-array interactions and downstream wake effects (I)** **Sara C. Pryor, Charlotte Hasager**	**Array-array interactions and downstream wake effects (II)** **Rebecca Barthelmie, Charlotte Hasager**
4	**Numerical Flow Simulation (I)** **Jens Norkær Sørensen, NN**	**Data-driven Modeling and Optimization of Wind Farms (I)** **Mahdi Abkar, Jens Norkær Sørensen**	**Data-driven Modeling and Optimization of Wind Farms (II)** **Mahdi Abkar, Jens Norkær Sørensen**
5	**Atmospheric Turbulence and Turbulence-Induced Loads (I)** **Joachim Peinke, NN**	**Impact of atmospheric and wake-induced turbulence on wind turbine loads** **Blondel, Jason Jonkman**	**Numerical Flow Simulation (II)** **Jens Norkær Sørensen, NN**
6	**Smart Blades Technologies (I. Sensors)** **Claudio Balzani, J. Riemenschneider**	**Smart Blades Technologies (II. Passive Devices)** **Bernhard Stoevesandt, Motofumi Tanaka**	**Wake Deflection and Load Mitigation** **Vlaho Petrović, Paul Fleming**
7	**Wind Farm Control (I)** **Jan-Willem van Wingerden, Vlaho Petrović**	**Wind Farm Control (II)** **Jennifer King, Jan-Willem van Wingerden**	**IEA Wind Task 25 - Towards 100% Renewables Energy Systems** **Hannele Holttinen, Nicolaos A. Cutululis**
8	**Control of Renewable Generators and Network Assets …** **Anca Daniela Hansen, Aeishwarya Umesh Baviskar**	**Offshore Energy Hubs: Beyond Electrons** **N.A. Cutululis, Alessandro Singlitico, Magnus Korpås**	**Wind Turbine Lifetime Extensions: Technologies, Risk, and Profitability** **Walter Musial, Michael H. Breitner**

May 25 (day 1) – all times w.r.t. Central European Summer Time (CEST)

Session title
(white text = mini-symposium | black text = regular session)
Session chairs

	1 early time slot **Tue | 13:40 - 15:20**	2 intermed. time slot **Tue | 15:30 - 17:10**	3 late time slot **Tue | 17:20 - 19:00**
9	**AURES II - Auctions for Renewable Energy Support II** Vasilios Anatolitis, Ann-Katrin Hanke	**Environmental Aspects, Life Cycles and Alternative Use of Wind Energy** Sarina Keller, Lena Kitzing	**Cost reduction in offshore wind farm projects – optimization of logistics ...** Katherine Dykes, Marcel Wiggert
10	**Maintenance, repair and refurbishment of wind turbines** Leon Mishnaevsky Jr., Bose Sumantraa	**Operation and Maintenance** NN, NN	**Condition & Structural Health Monitoring (I)** Wout Weijtjens, NN
11	**Structural Health Monitoring: Applications and Potential in ... (I)** Eleni Chatzi, Imad Abdallah, Vasilis Dertimanis	**ReliaBlade - Material Digital Twins for Wind Turbine Blades** Florian Sayer, Kim Branner	**Welded Connections of Offshore Wind Turbine Foundations - Fatigue ...** Falk Lüddecke, NN
12	**Bearing Behavior of Offshore Foundation Elements** Martin Achmus, Khalid Abdel-Rahman	**Structural Health Monitoring: Applications and Potential in ... (II)** Eleni Chatzi, Imad Abdallah, Vasilis Dertimanis	**Floating wind arrays: Oppertunites and Challenges** Cian Desmond, Matt Shields
13	**Floating Wind (I), Metocean Conditions** Jason Jonkman, Po Wen Cheng	**Advanced Design of Support Structures - Load Assesment, Structural ...** Michael Muskulus, Jochen Köhler	**Hydrodynamics of Floating Wind Turbines** Ilmas Bayati, Erin Bachynski
14	**Floating Offshore Wind Turbines model testing** Tommaso Battistella, Frank Lemmer	**Floating Wind (II)** Sandrine Aubrun, Arndt Hildebrandt	**Controls Co-Design of Floating Offshore Wind Turbines (II)** Alan Wright, Frank Lemmer
15	**Digital Twin Technology (I)** Carlo L. Bottasso, Stefan Hauptmann	**Controls Co-Design of Floating Offshore Wind Turbines (I)** Alan Wright, Frank Lemmer	**AWE System Modelling ... (I. Large Scale Deployment)** Roland Schmehl, Lorenzo Fagiano
16	**Challenges in Wind Tunnel Testing in Wind Energy Research (I)** Oguz Uzol, Michael Hölling, Joachim Peinke	**Challenges in Wind Tunnel Testing in Wind Energy Research (II)** Oguz Uzol, Michael Hölling, Joachim Peinke	

May 26 (day 2) – all times w.r.t. Central European Summer Time (CEST)

Session title (white text = mini-symposium | black text = regular session) **Session chairs**

	4 early time slot **Wed | 13:40 - 15:20**	**5** intermed. time slot **Wed | 15:30 - 17:10**	**6** late time slot **Wed | 17:20 - 19:00**
1	**Mesoscale modelling and forecasting (I)** **Martin Dörenkämper, NN**	**Wakes models and data** **Rebecca Barthelmie, NN**	**Large scale wind farm wake modeling** **Sara C. Pryor, NN**
2	**Interactions of large-scale offshore wind farms with the marine …** **M. Dörenkämper, Stefan Emeis, Nicolai Nygaard**	**Wind resource assessment (III)** **Ioanna Karagali, NN**	**Mesoscale modelling and forecasting (II)** **Julie Lundquist, NN**
3	**Numerical Flow Simulation (III)** **Jens Norkær Sørensen, NN**	**Lidars and numerical models – how they correspond and interact (I)** **Julia Gottschall, Peter Clive**	**Lidars and numerical models – how they correspond and interact (II)** **Julia Gottschall, Peter Clive**
4	**Atmospheric Turbulence and Turbulence-Induced Loads (II)** **Joachim Peinke, Laura Lukassen**	**Wind Farm Control (I)** **NN, NN**	**Wind Farm Control (II)** **NN, NN**
5	**Lidar-Assisted and Active Power Control** **Martin Kühn, David Schlipf**	**Smart Blades Technologies (III. Active Devices)** **Michael Hölling, Ricardo Pereira**	**Atmospheric Turbulence and Turbulence-Induced Loads (III)** **Dominic von Terzi, Samuel Davoust**
6	**Wind Energy and Grids: A Holistic View of Future Developments …** **Johanna Myrzik, Tobias Wendler**	**Systems Engineering for Wind Turbines** **Georg Jacobs, Katherine Dykes**	**Turbine Design Concepts** **Katherine Dykes, NN**
7	**Rotor Blade Materials: Joints** **NN, Raimund Rolfes**	**Reliability Adaptive Control for Wind Turbines and Wind Farms (I)** **Tobias Meyer, Niklas Requate**	**Reliability Adaptive Control for Wind Turbines and Wind Farms (II)** **Tobias Meyer, Niklas Requate**
8	**Installation of Offshore Wind Farms – Challenges and Potentials (I)** **Karl Henning Halse, Aljoscha Sander**	**Wind in Energy Systems** **Matti Koivisto, Lena Kitzing**	**Reliability Services from Wind Power** **Oscar Saborío-Romano, Nicolaos A. Cutululis**

May 26 (day 2) – all times w.r.t. Central European Summer Time (CEST)

Session title
(white text = mini-symposium | black text = regular session)
Session chairs

	4 early time slot **Wed | 13:40 - 15:20**	5 intermed. time slot **Wed | 15:30 - 17:10**	6 late time slot **Wed | 17:20 - 19:00**
9	**Condition & Structural Health Monitoring (II)** NN, NN	**Can Wind Power be Socially Acceptable?** Suzanne Tegen, Jan Hildebrand, Kristian Borch	**Wind Energy Economic and Policy Perspectives** Lena Kitzing, Cian Desmond
10	**Safety, risk and reliability in structural design** NN, NN	**Leading edge erosion of wind turbine blades (I)** Leon Mishnaevsky Jr., Charlotte Hasager	**Leading edge erosion of wind turbine blades (II)** Charlotte Hasager, Leon Mishnaevsky Jr.
11	**Wave Loads and Soil-Structure-Interaction** NN, NN	**Vibration-based Structural Health Monitoring (I)** (Christof Devriendt), Tanja Grießmann	**Testing of wind turbine blades (I)** Steffen Czichon, Peter Greaves
12	**Current Innovative Pilot Projects on Floating Wind Energy Technology** Mareike Leimeister, NN	**Extreme met-ocean conditions for offshore wind turbines ... (II)** Xiaoli Larsén, Jana Fischereit	**Vibration-based Structural Health Monitoring (II)** Keith Worden, Nikolaos Dervilis
13	**Extreme met-ocean conditions for offshore wind turbines ... (I)** Xiaoli Larsén, Charlotte Hasager	**Floating Wind: Reduction on LCoE (I)** Frank Adam, NN	**Floating Wind: Reduction on LCoE (II)** Frank Adam, José Cândido
14	**Demystifying Complex Terrain** Andrew Clifton	**Digital Twin Technology (II)** Christoph M. Hackl, Anton Kaifel	**Controls Co-Design of Floating Offshore Wind Turbines (III)** Alan Wright, Frank Lemmer
15	**AWE System Modelling ... (II. Control)** Roland Schmehl, Lorenzo Fagiano	**Machine Learning and Big Data Applications in Wind Energy (I)** Lars Landberg, Tuhfe Göçmen	**Machine Learning and Big Data Applications in Wind Energy (II)** Lars Landberg, Tuhfe Göçmen
16		**Innovative Rotor Concepts and Small Wind Turbines** NN, NN	

May 27 (day 3) – all times w.r.t. Central European Summer Time (CEST)

Session title (white text = mini-symposium | black text = regular session)
Session chairs

	7 early time slot **Thu | 13:40 - 15:20**	**8** intermed. time slot **Thu | 15:30 - 17:10**
1	**Wind farm modeling & analytical approaches** **Andrea Hahmann, NN**	**Meteorology and microscale modelling (I)** **Johan Meyers or Laura Lukassen, NN**
2	**Wind resource assessment (IV)** **Bjarke Tobias Olsen, NN**	**The pragmatic choice of wind models for Wind Resource Assessment** **Sarah Barber, Florian Hammer**
3	**Entrainment and Blockage Effects on Large Offshore Wind Farms (I)** **Tuhfe Göçmen, Jake Badger**	**Entrainment and Blockage Effects on Large Offshore Wind Farms (II)** **Tuhfe Göçmen, Jake Badger**
4	**Wind Farm Control (III)** **NN, NN**	**IEA Task 31 Wakebench "Wind Farm Flow Model Validation" (I)** **Javier Sanz Rodrigo, Patrick Moriarty**
5	**Numerical Flow Simulation (IV)** **Dominic von Terzi, Thorsten Lutz**	**Aero-Servo-Elasticity and Flexible Multibody Dynamics (I) & MDO (I)** **Carlo L. Bottasso, NN**
6	**Wind Turbine Bearings - Design, Test and Operation (I)** **S. Wandel, M. Stammler, F. Schwack**	**Wind Turbine Bearings - Design, Test and Operation (II)** **S. Wandel, M. Stammler, F. Schwack**
7	**Reliability of the Converter System** **Christian Zorn, Nando Kaminski**	**Advancements in Large Wind Turbine Rotor Technology** **Gerard Schepers, Todd Griffith**
8	**Electromagnetic Compatibility and Interaction with Radar ...** **Heyno Garbe, Sebastian Koj**	**Electrical Network Design and Optimization for Offshore Wind** **Juan-Andrés Pérez-Rúa, K. Dykes, N.A. Cutululis**

May 27 (day 3) – all times w.r.t. Central European Summer Time (CEST)

Session title (white text = mini-symposium | black text = regular session)
Session chairs

	7 early time slot **Thu | 13:40 - 15:20**	**8** intermed. time slot **Thu | 15:30 - 17:10**
9	**Installation of Offshore Wind Farms – Challenges and Potentials (II)** **Karl Henning Halse, Aljoscha Sander**	**How to (…) Different Research Perspectives in a Techno-Economically …** **Sarina Keller, P. Lehmann, Lena Kitzing, C. Foulds**
10	**Structural Design, Modelling and Simulation of WT Rotor Blades (I)** **(Claudio Balzani), (Xiao Chen)**	**Rotor Blade Materials: Manufacturing and Strength Prediction** **NN, Raimund Rolfes**
11	**Testing of wind turbine blades (II)** **Peter Greaves, Malo Rosemeier**	**Model validation, updating and system identification** **NN, NN**
12	**Geotechnical Engineering and Soil-Structure-Interaction** **Martin Achmus, Khalid Abdel-Rahman**	**Testing of wind turbine blades (III)** **Malo Rosemeier, Steffen Czichon**
13	**Aerodynamics of Floating Wind Turbines (I)** **Michael Hölling, Axelle Viré, Marco Belloli**	**Support Structures – Connection Details and Monitoring** **(Michael Muskulus), NN**
14	**IEA Wind Task 32: Wind Lidar (I)** **Andrew Clifton, Ines Wuerth, David Schlipf**	**Aerodynamics of Floating Wind Turbines (II)** **Michael Hölling, Axelle Viré, Marco Belloli**
15	**AWE System Modelling … (III. Performance and Flight Dynamics)** **Roland Schmehl, Hong Yue**	**IEA Wind Task 32: Wind Lidar (II)** **Andrew Clifton, Ines Wuerth, David Schlipf**
16		**Performance Metrics and Technology Assessment of AWE Systems** **Jochem Weber, Robert Thresher**

May 28 (day 4) – all times w.r.t. Central European Summer Time (CEST)

Session title (white text = mini-symposium | black text = regular session)
Session chairs

	9 early time slot **Fri | 13:40 - 15:20**	**10** intermed. time slot **Fri | 15:30 - 17:10**
1	**Minute-scale forecasting and power fluctuations** **Detlev Heinemann, NN**	**Wind resource assessment (V)** **Julia Gottschall, NN**
2	**Meteorology and microscale modelling (II)** **Stefan Ivanell, NN**	**Wakes and farms** **Dries Allaerts, NN**
3	**Lidars and floating wind energy – Collaboration of Innovative Training … (I)** **Jakob Mann, Ines Wuerth, Oliver Bischoff**	**Lidars and floating wind energy – Collaboration of Innovative Training … (II)** **Jakob Mann, Ines Wuerth, Oliver Bischoff**
4	**Aero-Servo-Elasticity and Flexible Multibody Dynamics (II)** **Joachim Peinke, Laura Lukassen**	**IEA Task 31 Wakebench "Wind Farm Flow Model Validation" (II)** **Javier Sanz Rodrigo, Patrick Moriarty**
5	**MDO (II) & Data-Driven Methods** **Carlo L. Bottasso, NN**	**Coupled Dynamics and Optimal Design** **Cristian G. Gebhardt, Jason Jonkman**
6	**Drive Train Mechanics, Gearbox and Bearings** **Amir Nejad,Georg Jacobs**	**Wind Turbine Bearings - Design, Test and Operation (III)** **S. Wandel, M. Stammler, F. Schwack**
7	**Wind Turbine Drive Trains: Trends and Technologies** **Amir Ebrahimi, Bernd Ponick**	**Wind Turbine and Plant Optimization beyond LCoE** **Dominic von Terzi, Carlo L. Bottasso**
8	**Social Acceptance (Community Acceptance)** **Cian Desmond, Lena Kitzing**	**Wind Power Integration** **Ola Carlson, Magnus Korpås**

May 28 (day 4) – all times w.r.t. Central European Summer Time (CEST)

Session title (white text = mini-symposium | black text = regular session)
Session chairs

	9 early time slot **Fri | 13:40 - 15:20**	**10** intermed. time slot **Fri | 15:30 - 17:10**
9	**Structural Design, Modelling and Simulation of WT Rotor Blades (II)** **(Steffen Czichon), (Claudio Balzani)**	**Wind Hybrid Power Plant** **Poul Sørensen, Kaushik Das**
10	**Condition & Structural Health Monitoring (III)** **Eleni Chatzi, NN**	**EERA JP Wind (…) How Can Wind Energy Create Even Higher Value …** **Lena Kitzing, Julia Kirch Kirkegaard**
11	**Novel sensing and new measurement concepts for wind turbines** **NN, NN**	**Structural Design, Modelling and Simulation of WT Rotor Blades (III)** **(Xiao Chen), (Steffen Czichon)**
12	**Data-driven technologies for O&M cost reduction (I)** **Angela Meyer, Ravi Pandit**	**Data-driven technologies for O&M cost reduction (II)** **Angela Meyer, Ravi Pandit**
13	**Support Structure Connections - Latest Research on Ring Flanges …** **Marc Seidel, Peter Schaumann**	**MaRINET2 Round Robin Testing Results** **Cian Desmond, NN**
14	**Research at Germany´s First Offshore Wind Farm alpha ventus (I)** **Kai Herklotz, Bernhard Lange**	**Research at Germany´s First Offshore Wind Farm alpha ventus (II)** **Kai Herklotz, Bernhard Lange**
15	**AWE System Modelling … (IV. High-Fidelity Modelling)** **Roland Schmehl, Hong Yue**	**Advances in High-Performance Computing for Wind Energy Applications** **Mohsen Lahooti, Bruno Carmo**
16		