

Tuesday 5 September

16:30



Wednesday 6 September

Building 3703, Room 023 Building 3701, Room 268 Building 3701, Room 267 Building 3702, Room 031 Building 3703, Room 335

8:30

Registration

9:00

Opening Session
Raimund Rolles
Athanasios Kolios

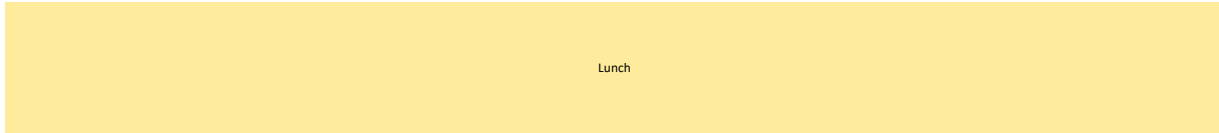
10:00

Coffee

10:30

Production, O&M, decommissioning and lifetime extension	Control of wind turbines and wind farms	General topics of wind energy	Reliability, monitoring and sensing technology	Support structures and geotechnics
Kainz Samuel: Tradeoffs between economics and climate-related impacts in the design of offshore wind farms	Onnen David: Comparison of load- and lidar-based wake estimation in simulations, wind tunnel and field experiments	Obradovic Katarina: Physical design of hybrid power plants	Dierksen Niklas: Uncertainty quantification in model updating with Monte Carlo sampling and global optimisation	Qian Han: Data-driven assistant for conceptual design of offshore jacket substructures
Guilloré Adrien: Tradeoffs between economics and climate-related impacts in the design of wind turbines and airborne kites	Bohrer Jan Kai: Wind field reconstruction and prediction for adaptable wind farm control optimisation	Schubert Jenny: Numerical Accuracy of Principal Geodesic Analysis on the Sphere	Ragnitz Jasper: Model Updating for damage localisation and quantification using a multi-objective extension of the Global Pattern search	Drexler Sebastian: Analytical integration of Dirlik's distribution for bilinear S-N curves
Hübner Martin: Hybrid use of LTT welding filler metals for fatigue strength improvement of high-strength steel components	Afanasieva Nadia: Improving the Quality of Wind Field Reconstruction Techniques for Lidar-assisted Control of Wind Turbines	Märtins David: Derivation of a nonlinear coupling element for the modelling of the soil structure interaction of large offshore wind turbines	Galhardo António: Safety control and lifetime prediction of wind turbines based on digital twins and structural health monitoring	McLaughlin Emmet: A review of the existing methods of phase field modelling for fatigue life predictions
Großmann Friederike: Investigation of Leading edge erosion and its mitigation on the levelized cost of energy for horizontal axis wind turbines	Gori Filippo: Wind farm power maximisation via wake steering using Gaussian process-driven yaw-dependent parameter tuning	Wenske Anne-Kathrin: On the way to high(er) fidelity FSI simulations	Yildirim Busra: Uncertainty quantification of the floating wind turbine modelling chain	Raúl Beltrán: Hysteretic Nonlinear Model for Describing Fatigue Behavior of Concrete in Hybrid Towers
Khalid Omer: Cost-benefit analysis for robotics-driven inspection of floating offshore wind farms	Janssens Nick: Towards real-time optimal control of wind farms using large-eddy simulations	Khan Mehtab: Guidelines on Accurate Numerical Simulation of Atmospheric Gravity Waves in Wind Farm Applications	Reinhardt Tim: Influence of the rotor nacelle assembly modelling on the eigenfrequencies of offshore wind turbines with monopile foundations	Borgelt Jakob: Fatigue crack development in axially loaded grouted connections
	Flanagan David: Control-Oriented modelling of Wind Farms using Computationally Efficient Methods	Syed Huzaifa: Optimisation of dynamic cable configuration for FOWT	Shadmani Alireza: Probabilistic peridynamics model for damage calculation of wind turbine blades	

12:00



13:15

Wind farm and wakes	Wind resources, turbulence and acoustics	Hydrodynamics of offshore wind turbines	Reliability, monitoring and sensing technology	Aero-elastics and blade technology
Daenens Simon: Reinforcement learning for health-aware fleet control of wind farms	Bock Marcel: Investigation of intermittency in LES with synthetic turbulent inflow	Meyer Jannik: The simulation of nonlinear crane load motion during offshore operations using Heavy Lift Vessels	Christoffers Marcel: Influence of repair measures on the fatigue behaviour of rotor blades	Schuster Daniel: Verification of a new mid-fidelity aeroelastic simulation tool for large wind turbines
Jané-Ippel Christian: Bayesian optimisation of a two-turbine layout around a 2D hill using Large Eddy Simulations	Moreno Daniela: Center of Wind Pressure: A comparison between atmospheric and standard synthetic wind fields	Satari Ramish: Temporal scour evolution around a monopile and a jacket structure: An experimental study	Jüchter Julian: Characterizing wind fields by applying a Langevin Analysis to model wind turbine measurement data	Antunes Ana: Validation of structural models for wind turbine blades with different levels of fidelity
Ruck Nico: Optimisation of flexible wind farm control strategies under consideration of uncertainties	Pinilla Sebastian: Reconstruction of wind fields by a superstatistical synthetic model constrained on wind tunnel measurements	McMillan Ailsa: Design, assembly, and characterisation of a floating offshore wind turbine for hydrodynamic assessment using physical model tank testing.	De Pascali Marco: Design of a 1m-rotor wind turbine model for wind tunnel testing	Cespedes Moreno Juan Felipe: Quantification of performance difference between two and three dimensional flows around blade root sections
Martins Flavio: 3D Unsteady CFD Model for Multi-Rotor Multi-Body Fluid Structure Interaction	Borowski Johanna: Predicting future wind speeds based on climate projections and MCP-methods	Herdayanditya Ivandito: Preliminary Experimental Study of Wave Field Around Monopile		Ntrelia Konstantina: Multirate coupling in aeroelastic simulations using the actuator line model

14:15

Coffee

14:45

Diversity Session
James Gilbert and Kane Needham
Joana Rieck

Thursday 7 September

	Building 3703, Room 023	Building 3701, Room 268	Building 3701, Room 267	Building 3702, Room 031	Building 3703, Room 335
9:00	<div style="background-color: #c8e6c9; padding: 5px;"> Keynote Session Jos Beurskens Julia Gottschall Nikhar Abbas </div>				
10:30	Coffee				
11:00	<div style="background-color: #c8e6c9; padding: 5px;"> Meet the Industry ENERCON GmbH JÖRSS-BLUNCK-ORDEMANN GmbH Ramboll GmbH wpd windmanager GmbH & Co. KG Wölfel Holding GmbH </div>				
12:45	Networking Lunch				
14:00	Aero-elastics and blade technology	Wind resources, turbulence and acoustics	Electrical conversion, energy system and wind power-to-X	Floating wind turbines	
	Werthen Edgar: Aero-structural coupled optimization of a rotor blade for an upscaled 25 MW reference wind turbine	Julius Hessel: Physics-informed Machine Learning Approach for Outdoor Sound Propagation Model	Riofrio Jonathan: Current Trends for Optimal Sizing and Design of Hybrid Energy Systems Under the Context of Power-to-X	Messmer Thomas: Wind tunnel investigation of the wake dynamics of a floating offshore wind turbine	
	Ribnitzky Daniel: The "Hybrid-Lambda" rotor: A concept overview and wind tunnel validations	Adeel-Ur-Rehman Arslan: Improved performance of k- Omega SST turbulence model in predicting airfoil characteristics for a large range of airfoil thicknesses	Buckhold Sarah: Feasibility Analysis of Using Stranded Wyoming Wind Resource for Green Hydrogen Production	Hubert Antonin: Wake dynamics study of a floating wind turbine model through phase-averaging	
	Seelemeyer Philipp: Toolchain for an aerodynamic wind turbine optimization using CFD with script-based meshing and parametric CAD in-the-loop	Preamsakul Wasina: Roughness effects on the aerodynamics of inboard and outboard sections of a wind turbine blade	Oudich Younes: Methodology for battery sizing in microgrids with wind turbines and electrolyzers using EMT simulations	Sripathy Kiran: Experimental study of the dynamic induction of a surging actuator disc	
	Pamfil Bogdan: Wind turbine stability analysis with rotating modes	Hegab Mohamed: The Spatial Development of Turbulence and its Effect on Aerodynamics	Nguyen Thuy-Hai: Adequacy Computations for Power Systems with a High Share of Offshore Wind Generation: Application to Belgium		
15:00	Coffee				
15:30	Wind farm and wakes	Control of wind turbines and wind farms	General topics of wind energy	Reliability, monitoring and sensing technology	Support structures and geotechnics
	Raby Kaiya: Developing Computationally Efficient Wake Models for Wind Farm Simulation Software	Malyi Max: Wind Turbine Lifetime Extension-Oriented Control System Based on Machine Learning	Kaliske Malte: Innovative combination approach for environmental parameters of offshore wind turbines	Möller Sören: Investigations towards data normalisation using Gaussian processes for the estimation of modal parameters of a lattice tower under environmental conditions	Geng Fei: Study on Scour Around Monopiles Under Coupling Effects of Periodic Tides and Monopile Vibration
	Trigaux Francois: Aeroelastic simulations of the IEA 15-MW turbine in LES using the flexible actuator line method	Zengler Clemens: RANS simulation of a wind turbine in complex terrain - impact of flow deceleration and acceleration in combination with turbine modeling on power, thrust and induction	Mohamed Omar: Assessing the performance of the ALM in close-proximity Darrieus turbines: a critical analysis	Faller Luca: Domain Generalization Potential of Data-Driven Methods for Predictive Maintenance in Wind Energy Systems	Zinas Orestis: 3D Probabilistic Site Characterization
	Mohammadi Mohammad Mehdi: Onward toward the aeroelastic coupling of an actuator sector model	Cioni Stefano: Development of an open-source controller for small stall-regulated horizontal-axis wind turbines	Prigge Felix: Numerical buckling analysis of rotor blade sandwich panels with spatially distributed material uncertainties	Oliveira Catarina: Safety control through intelligent population-based structural health monitoring and transfer learning	Sanders Immo: Numerical Simulation of Suction Caissons under Axial Loading
	Wellmann Anna: Modeling and simulating wind-induced loads on wind turbines with the Lattice-Boltzmann method	Hamzah Siti Khadijah: Operational Network Planning for Different Multi-Terminal High Voltage Direct Current Offshore System Interfaced Wind Integration	Orbay Akcengiz Ezi: Transition Predictions of DU 00-W-212 and Investigation of Linear Solver Methods for High Reynolds Numbers	Edler Amelie: Comparison of the dynamic behaviour of the tower of an onshore and an offshore wind turbine	Elahi Seyed Ahmad: Thermometric investigation of fatigue crack initiation from corrosion pits in structural steel used in offshore wind turbines
	Meijer Jorrit: AI-based refinement of mesoscale simulations for wind energy applications	Visbech Jens: Mitigating leading edge erosion in wind farms through optimal erosion-safe mode control	Lüdecke Fiona: A Story of a PhD - Expectations vs. Reality	Saxena Isha: Data Driven Infrastructure Planning For Offshore Wind Farms	Goldau Norman: Model testing of a gravity foundation in sand
			Gebauer Julia: Impact of geometrically non-linear cross-sectional deformations of rotor blades on aerodynamic properties		Eichner Lukas: Design of offshore jacket support structure for experimental fatigue life evaluation
19:00	Dinner				

Friday 8 September

	Building 3703, Room 023	Building 3701, Room 268	Building 3701, Room 267	Building 3702, Room 031	Building 3703, Room 335
9:00	<p>Wind farm and wakes</p> <p>Schlöter Jens Peter : RANS based PINN wake surrogate</p> <p>Korb Henry: How to keep it fast - Upholding Computational Performance While Increasing Complexity in Wind Farm Simulations</p> <p>Kherlen Jigjid: Data-Driven RANS Closures for Wind Farms Under Neutral Atmospheric Conditions</p>	<p>Wind resources, turbulence and acoustics</p> <p>Abdulrazek Abdulkarim: High resolution measurements of turbulent structures in atmospheric flows using a met mast array</p> <p>Uluocak Sinem: Effect of the probe volume on wind speed measured by short-range continuous wave lidars in a free-field test site</p> <p>Meyer Paul: Tackling turbulence intensity from a lidar perspective</p>	<p>Emerging technologies</p> <p>Panagiotou Emmanouil: Synthetic Design Alternatives for Offshore Wind Turbine Substructures</p> <p>Kouaissah Otman: VAWTs in tilt condition: A comparative CFD study of different concepts</p> <p>Yahaya Taiwo: Computational study of vortex induced wind turbine for electricity generation in low latitude tropical regions</p> <p>Edirisinghe Dylan S: Droplet impact modelling to predict the rain-induced Erosion of wind turbine blades</p>	<p>Floating wind turbines</p> <p>Novais Felipe: Aerodynamic Design of Floating Offshore Wind Turbines Scaled Models for Wave Basin and Wind Tunnel Testing</p> <p>Lee Kai: An investigation of the interaction between floating wind turbines and direct drive generators air gaps.</p> <p>Philipp Christian: Floatwin - Langevin analysis of floating wind turbines</p> <p>Minne Leon Jan: Implementation and Evaluation of a Simplified Mooring Line Model for Offshore Wind Turbines</p>	
10:00	Coffee				
10:30	<p>Wind farm and wakes</p> <p>Bührend Lukas: Numerical Simulations of Boundary Layer Processes relevant for Wind Parks</p> <p>Centurelli Gabriele: Assessing cluster wake description in engineering models and WRF with Lidar and SCADA</p> <p>Devesse Koen: Atmospheric Perturbation Model for Modelling Wind-Farm Gravity-Wave Interaction</p> <p>Paulsen Johannes: Mesoscale effects of the interactions between wind farm clusters with large innovative rotor concepts and the boundary layer</p>	<p>Emerging technologies</p> <p>Lochhead Robert: Thermoplastic Blades for Multi-Rotor Wind Turbine Application</p> <p>Pynaert Niels: Unsteady aerodynamic simulations of an airborne wind energy system in realistic flight and environmental conditions using computational fluid dynamics</p> <p>Crismer Jean-Baptiste: Large Eddy Simulation of Airborne Wind Energy Systems flying optimal trajectories in turbulent wind</p>	<p>Electrical conversion, energy system and wind power-to-X</p> <p>Keslake Rachael: Feasibility of production of synthetic fuel in an offshore environment</p> <p>Isbister Callum: Evaluation of Acoustic Noise Emitted by Power Electronic Equipment in a Variable-Speed Wind Turbine</p> <p>Wagner Martin: Langevin analysis of control parameters in wind turbines</p> <p>Souza De Alencar Mauricio: Graph-based diffusion solvers for wind farm collection system layout optimization</p>	<p>Reliability, monitoring and sensing technology</p> <p>Fernandes De Oliveira Junior Adeldo: Improving Acoustic Emission Measurement Reliability in Remote Sites by Using a Mobile Verification Setup</p> <p>Bartels Jan-Hauke: Hardware Redundancy for Sensor Degradation Detection in SHM Systems using Strain Gauge Measurements</p> <p>Rodrigues Faria Bruno: Lifetime counting of a wind turbine tower based on fatigue accumulation</p> <p>Xu Ronghua: Energy spectral analysis of wire breaks in post-tensioned tendons for wind turbines</p>	
11:30	Closing Session				
12:00	Lunch				
13:00	Excursions				