



Wednesday 18 January

Opening session – Frontiers of science and technology

Chairs: John Olav Tande, SINTEF and Trond Kvamsdal, NTNU

09.00 Opening by State Secretary Elisabeth Sæther

09.15 The role of research to accelerate offshore wind development, Alexandra Bech Gjørsv, CEO, SINTEF

09.30 EERA DeepWind: 20 years of ground-breaking research and exciting times to come, John Olav Giæver Tande, chief scientist, SINTEF

09.45 Global offshore wind market status and outlook, Jon Dugstad, Director, Norwegian Energy Partners

10.00 Floating wind technology, Finn Gunnar Nielsen, professor, University of Bergen (UiB)

10.15 Grand challenge Grid –challenges and opportunities for offshore wind, Hannele Holttinen, Operating Agent, Grid Integration Task 25 of IEA Wind, and partner at Recognis Oy

10.30 Break

10.45 Industrialising floating wind, Kristian Holm, Technology Director, Equinor

11.00 Researcher training, Charlotte Bay Hasager, professor, Technical University of Denmark (DTU)

11.15 Environmental design, Roel May, senior researcher, Norwegian Institute for Nature Research (NINA)

11.30 International collaboration within offshore wind research, Ignacio Martí, director, EERA JP wind

11.45 Closing by chair

12.00 Lunch



Wednesday 18 January cont. with parallel sessions

	1A) New turbine and generator technology Chairs: Valentin Chabaud, SINTEF and Gerard van Bussel, TU Delft	1B) Met-ocean conditions Chairs: Joachim Reuder, University of Bergen and Etienne Cheynet, University of Bergen	1C) Experimental testing and validation Chairs: Luca Oggiano, IFE, Ole David Økland, SINTEF and Amy Robertson, NREL
1300	Introduction by chair	Introduction by chair	Introduction by chair
1305	Increased tower eigenfrequencies on floating foundations and their implications for large two- and three-bladed turbines – Fabian Anstock, Hamburg University of Applied Sciences	Lidar measurements of wind across a virtual rotor plane – Mohammad Nafisifard, UiS	Automatic Data Quality Control using Probabilistic Bayesian Neural Networks – Anish Venu, DNV
1320	Aero-structural coupled optimization of a rotor blade for an upscaled 25 MW reference wind turbine – Edgar Werthen, German Aerospace Center	Implementation of non-constant advection time into MCP methods to improve correlation between space-distributed meteorological datasets - Telem Avidor, Ecole Centrale Nantes	Numerical investigation on TLP platforms for wind turbines under extreme actions using the SPH method – Bonaventura Tagliaferro, UPC Barcelona Tech
1335	Unlocking critical design challenges of pre-commercial floating wind turbines – Mikel Iribas, CENER	Metocean Conditions at Two Norwegian Sites for Development of Offshore Wind Farms – Etienne Cheynet, UiB	A Potential Flow Based Numerical Framework for Engineering Design of Floating Offshore Wind Turbine Foundations – Pietro Danilo Tomaselli, DHI
1350	25MW Rotor Design: Upscaling and Initial Multidisciplinary Integrated Design – Luca Oggiano, IFE	Wind field reconstruction with offshore nacelle-mounted LIDAR measurements – Rebeca Marini, Vrije Universiteit Brussel	Coupled loads on a bottom-fixed monopile induced by waves in a strong subsurface current – Yan Li, UiB & NTNU
1405	Wake interaction and scale effect on a large floating wind turbine foundation – Fengjian Jiang, SINTEF Ocean AS	Is IEC turbulence valid offshore at large heights? – Abdul Haseed Syed, DTU Wind Energy Denmark	Validation of high-fidelity CFD solutions for the analysis of aerodynamic loads on wind turbines – Vladimir Krasilnikov, SINTEF Ocean AS
1420	Design and simulation of 40 MW PM Generators for the CRAFTT – Izabella Simonsson, Sandra Eriksson, Hans Bernhoff; Uppsala University	LES study of the impacts of swells on the atmospheric boundary layer - Xu Ning, UiB	Validation of a panel method with full-scale FOWT measurements and verification with engineering models – Stefan Netzband, Hamburg Uni. of Tech.
1435	Break		



Wednesday 18 January cont. with parallel sessions

	2A) New turbine and generator technology (cont.)	2B) Met-ocean conditions (cont.)	2C) Experimental testing and validation (cont.)
1505	Scalability of the CRAFT turbine – Fredric Ottermo, Halmstad University	Retrieval of met-ocean parameters from satellite observations: applications for offshore wind energy – Owda Abdalmenem, Technical University of Denmark	Data-driven modelling of linear and quadratic transfer functions of floating structures – David Stamenov, Aarhus University
1520	VAWT support structure mass sensibility due to the aerodynamic load scaling – Adriana Correia da Silva, NTNU	Multi-Dimensional data format enabling rapid assessment of wind resources anywhere in the world – Phil Hargreaves, TGS	Validation of Impact of Hull-Based Tuned-Mass Dampers in Floating Wind Semisubmersible on Global Dynamics – Amy Robertson, National Renewable Energy Laboratory
1535	The influence of journal bearings on the drivetrain dynamics of a 5MW wind turbine drivetrain – Muhammad Omer Siddiqui, Fraunhofer IWES	Implementation of a Simple Actuator Disk for Large Eddy Simulation (SADLES) in the WRF Model, Hai Bui, UiB	Comparative assessment of actuator-Line modeling of FOWT rotor aerodynamics to wind tunnel experiments– Andrea Sanvito, Politecnico di Milano
1550	Advanced Cooling Enabling Extremely High-Power Density Electric Machines – Austin Christopher Hayes, University of Colorado	A review of wave-current interaction in met-ocean conditions for offshore wind turbines – Yan Li, UiB & NTNU	Comparison of different Modelling Approaches for the Simulation of a Wind Turbine in Surge Motion – Christian Schulz, Hamburg University of Technology
1605	High-fidelity analysis of a small-scale floating wind turbine under prescribed sway, heave, roll and yaw - Ricardo Amaral, Siemens Gamesa Renewable Energy	Large-eddy simulation of a 15 GW wind farm and comparison with advanced wake models – Oliver Maas, Leibniz University	Streamwise scalings of a wind turbine operated with different inflows and tip speed ratios – Martin Obligado, Grenoble Alpes University
1620	Closing by chair	Closing by chair	Closing by chair
1630	Break		
1800	Conference reception and poster session: Welcome by Johan Hustad, Director NTNU Energy. Music, finger-food and drinks at Radisson Blue Royal Garden Hotel combined with poster session. Posters listed on next pages.		



Thursday 19 January

3A) Grid connection and power system integration – Chairs: Kjetil Uhlen, NTNU & Olimpo Anaya-Lara, Uni. Strathclyde		3B) Substructures and mooring Chairs: Arno van Wingerde, Fraunhofer & Michael Muskulus, NTNU	3C) Side-event: EU-calls
0900	Introduction by chair	Introduction by chair	Norwegian Offshore Wind invites for a side event at DeepWind 2023 to present and discuss EU-calls on offshore wind. See detailed agenda at separate page.
0905	ScotCLUE Demonstrator – Smarter Energy Controllers for Future Offshore Wind Energy Systems, John Nwobu, Offshore Renewable Energy Catapult	This session will have slightly longer presentations and more time for discussion:	
0920	Design and Control of All-DC Offshore Wind Power Plant with MMC-based High Power Converters – Alessandra Follo, Technical University of Denmark	<ul style="list-style-type: none"> ▪ Implementation of drivetrain structural flexibility in OpenFAST – Veronica Liverud, NTNU ▪ Quantifying the effect of rock armour scour protection on eigenfrequencies of a monopile supported OHVS – Kristof Winkler, Vrije Universiteit Brussel 	
0935	30 GW Offshore wind in Norway – wind power correlations and smoothing effects – Harald Svendsen, SINTEF Energy Research	<ul style="list-style-type: none"> ▪ Second order wave-induced modal loads and responses on floating wind parks with shared mooring – Thomas Sauder, SINTEF Ocean 	
0950	Addressing Market Issues in Electric Power Systems with Large Amounts of Offshore and Onshore Wind Power – Magnus Korpås, NTNU IEL	<ul style="list-style-type: none"> ▪ Design Optimization of Floating Wind Turbine Substructures Using Frequency Domain Dynamic Model and Genetic Algorithm – Victor Benifla, Universität Rostock 	
1005	Managing energy spill in integrated wind turbine – electrolyser systems – James Ferguson, Offshore Renewable Energy Catapult		
1020	DC Fault Protection and Clearing Strategy for an MMC Based HVDC Transmission with Hybrid DCCB – John Kweku Amoo-Otoo, University of Idaho		
1035	Break		



Thursday 19 January (cont.)

4A) Grid connection and power system integration (cont.)	4B) Substructures and mooring (cont.)	4C) Side event: PhD LIKE network
<p>1050 Sizing electrolyser for offshore wind: a techno-economic assessment considering module size and dynamics – Elisabeth Andreae, Technical University of Denmark</p>	<p>This session will have slightly longer presentations and more time for discussion:</p> <ul style="list-style-type: none"> ▪ Effect of the shape of extreme waves on the loads on a 15MW wind turbine – Fabio Pierella, DTU Wind and Energy Systems ▪ Design challenges and novel solution for tower designs of next generation floating wind turbines – Eystein Borgen, Odfjell Oceanwind AS, Sebastian Schafhirt, Siemens Gamesa ▪ Damage Detection in the Mooring System of Spar Floating Offshore Wind Turbines through Statistical Methods – Christos Sakaris, Rune Schlanbusch, NORCE AS 	<p>The Marie Curie PhD network LIKE invites for a side event at DeepWind 2023. See detailed agenda at separate page.</p>
<p>1105 Power and frequency fluctuations on an offshore oil & gas platform power system with connected wind turbines – Til Kristian Vana, SINTEF Energi</p>		
<p>1120 Resilience to storm conditions of power systems with large dependencies on offshore wind – Samuel Forsberg, Uppsala University</p>		
<p>1135 Optimisation of offshore grid considering stepwise investments and uncertainty – Harald Svendsen, SINTEF Energy Research</p>		
<p>1150 Closing by chair</p>	<p>Closing by chair</p>	
<p>1200 Lunch</p>		



Thursday 19 January cont.

5A) Wind farm optimization Chairs: Yngve Heggelund, NORCE and Henrik Bredmose, DTU		5B) Environmental impact & regulatory framework Chairs: Roel May, NINA, Dorothy Dankel, SINTEF, and Catherine Banet, UiO		5C) Side event (PhD LIKE network cont.)
1300	Introduction by chair	Introduction by chair		The Marie Curie PhD network LIKE invites for a side event at DeepWind 2023. See detailed agenda at separate page.
1305	Towards generating more value out of measurement data using wind farm performance monitoring methodologies – Nassir Rodrigues Cassamo, TNO	Catalysing an Industry: a historical analysis of the emerging US offshore wind industry – Julian Richard Lahuerta, NTNU		
1320	Efficient Mann turbulence generation for offshore wind farms with applications in fatigue load surrogate modelling – Jaime Liew, DTU Wind	Overview of offshore wind regulations – Anne Reumer, DNV		
1335	Recent Wind Farm Modelling Enhancements in FAST.Farm – Jason Jonkman, National Renewable Energy Laboratory	Risk of exposure to offshore wind developments: Breeding failure causes seabirds to increase foraging ranges – Børge Moe, NINA		
1350	Influence of wake meandering paths on floating wind turbine response – Lene Vien Eliassen, SINTEF	Mitigation measures for preventing collision of birds with wind turbines – Paula Bastos Garcia Rosa, SINTEF Energy Research		
1405	A passively self-adjusting floating wind farm layout to increase the annual energy production: sensitivity analysis – Mohammad Youssef Mahfouz, Stuttgarter Lehrstuhl für Windenergie	Balancing socio-ecological and economy trade-offs in spatial planning of wind energy projects – Frank Hanssen, NINA		
1420	Economic feasibility study for continued operation of German offshore wind farms – Julia Walgern, Fraunhofer IWES	Closing by chair		
1435	Break			



Thursday 19 January cont.

6A) Wind farm optimization (cont.)		6B) Wind farm control		6C) Marine operations and logistics	
		Chairs: Konstanze Kölle, SINTEF and Paul McKeever, ORE Catapult		Chairs: Henning Braaten, SINTEF and Elin Halvorsen-Weare, SINTEF	
1500	Introduction by chair		Introduction by chair		Introduction by chair
1505	Design and costs-benefits of shared anchors or mooring lines of FOWT at farm level – Maxime Chemineau, INNOSEA		Robust Active Wake Control: wind direction measurement uncertainty driven analysis in a sensor-equipped wind farm – Marco Turrini, TNO		Operations and vessel tracking for a tow-to-port maintenance strategy at the Kincardine offshore windfarm – Kaiser Saeed, Laura DM Corgosinho, Uni. of Strathclyde
1520	Effect of wind turbine yaw misalignment on wake meandering – Balram Panjwani, SINTEF		Testing a quasi-static reinforcement-learning approach for wake steering in dynamic wind farm simulations, Valentin Chabaud, SINTEF Energy Research		On the installation of offshore wind turbines: Challenges and future perspectives – George Jagite, SINTEF Ocean AS
1535	A control-oriented model for floating wind turbine stability and performance analysis – Antonio Pegalajar-Jurado, DTU Wind and Energy Systems		An expert elicitation on flow models for wind farm control – Scott Robert Dallas, University of Strathclyde		Development of a Risk Analysis Model for the Installation of Offshore Wind Farms – Nico Garcia Munoz, Fraunhofer IWES
1550	Multiscale modelling of low-level jet: Effects on aerodynamic load of offshore wind turbine – Mostafa Bakhiday Paskyabi, UiB		NN		Optimizing jack-up vessel chartering strategies to support maintenance tasks in offshore wind turbines – Vibeke Petersen, NTNU
1605	Cost modelling for offshore wind farms using dynamic cost functions and engineering wake models – Kutay Yilmazlar, Politecnico di Milano		Offshore Digitalization – Brian Boye, Semco Maritime		Investigation of more efficient W2W operability simulations – Martin Gutsch, SINTEF Ocean
1620	Closing by chair		Closing by chair		Closing by chair
16.30	Break				
17.00	Poster session and pre-dinner refreshments (posters listed on next pages)				
19.00	Conference festive dinner				



Thursday 19 January (0900-1035): Side event EU calls

Norwegian Offshore Wind invites for a side event at DeepWind 2023 to present and discuss EU calls on offshore wind.

Agenda

1: Presentation of EU calls, Tim Genge, EU advisor, Innovation Norway

2: Open discussion on specific calls:

- Critical technologies for the offshore wind farm of the Future
- Critical technologies to improve the lifetime, efficient decommissioning and increase the circularity of offshore and onshore wind energy systems
- Digital twin for forecasting of power production to wind energy demand
- Demonstrations of innovative floating wind concepts
- Other (Innovation fund tbc.)

3: Conclusion and the way forward, Tor Arne Johnsen, EU advisor, Norwegian Offshore Wind



Thursday 19 January (1050-1435): Side event PhD LIKE network

The Marie Curie PhD network [LIKE](https://www.msca-like.eu/) invites for a side event at DeepWind 2023. LIKE (Lidar Knowledge Europe) fosters training and education of 15 young researchers on emerging laser-based wind measurement technologies and their translation into industrial applications. LIKE H2020-MSCA-ITN-2019, Grant number 858358 is funded by the European Union, <https://www.msca-like.eu/>

Time	Title	Presenter
10:50 – 11:00	Welcome and introduction to LIKE	Prof. Jakob Mann & Charlotte Hasager (DTU, DK)
11:00 – 11:30	Lidars and modelling of offshore winds. Chair-person: LiQin Jin	
11:00 – 11:10	The contribution of Aeolus data to surface wind forecast with ECMWF model	Ms. Haichen Zuo (DTU, DK)
11:10 – 11:20	Validation of NORA3, NEWA and ERA5 against tall wind profiles from lidar observations	Mr. Jan Markus Diezel (UiB, NO)
11:20 – 11:30	Application of ship-based floating lidar measurements for offshore wind resource characterization	Mr. Hugo Rubio (IWES, DE)
11:30 – 12:00	Lidars and modelling of winds at land and fjords. Chair-person: Zhaoyu Zhang	
11:30 – 11:40	Turbulence characterization at exposed airports by lidar measurements and model simulations	Mr. Sai Wang (UiB, NO)
11:40 – 11:50	Wind simulation and lidar measurements in complex terrain	Ms. Isadora Coimbra (UPorto, PT)
11:50 – 12:00	Wind Lidar Technology for Bridge Engineering	Mr. Mohammad Nafisifard (UiS, NO)
12:00 – 13:00	Lunch break	
13:00 – 13:40	Lidars and uncertainties. Chair-person: Jan Markus Diezel	
13:00 – 13:10	Quantifying uncertainty in long-range lidar measurements of wind turbine wakes: effect of lidar beam misorientation	Ms. Priscila Orozco (UL, DE)
13:10 – 13:20	Assessing wind turbulence intensity and radial velocity uncertainties using a lidar simulator	Mr. Francisco Costa (USTUTT, DE)
13:20 – 13:30	Improving wind speed estimation by three continuous-wave WindScanners	Ms. LiQin Jin (DTU, DK)
13:30 – 13:40	Lidars for Wind Tunnels	Mr. Shahbaz Pathan (DTU, DK)
13:40 – 13:45	Short break	
13:45 – 14:35	Lidars and wind turbines. Chair-person: Sai Wang	
13:44 – 13:55	Inflow characterization using nacelle lidars with different scanning strategies	Ms. Wei Fu (DTU, DK)
13:55 – 14:05	Quantifying the effect of cluster wakes on offshore wind turbine loads using	Mr. Arjun Anantharaman (UOL, DE)
14:05 – 14:15	Yaw misalignment estimation of nacelle lidar	Mr. Zhaoyu Zhang (POLIMI, IT)
14:15 – 14:25	Improved modeling of lidar wind preview for wind turbine control	Mr. Feng Guo (FUAS, DE)
14:25 – 14:35	Wind turbine power curve modelling in wake using nacelle lidars	Mr. Alessandro Sebastiano (DTU, DK)



Friday 20 January

7A) Societal impact and controversies Chairs: Rita V. D'Oliveira Bouman, NTNU and Lena Kitzing, DTU		7B) Operation & Maintenance Chairs: Iver B. Sperstad, SINTEF and Jonas Kaczenski, Fraunhofer		7C) Side-event: XROTOR (0900-1130)
0900	Introduction by chair		Introduction by chair	<p>The XROTOR consortium (https://xrotor-project.eu/) invites for a side-session at Deepwind 2023.</p> <p>Agenda</p> <ol style="list-style-type: none"> 1. Overview of the concept and operation (William Leithead / Laurence Morgan, Strathclyde) (30 minutes) 2. CFD analysis and aerodynamic models (Carlos Ferreira, Delft, & Beatriz Mendez Lopez, CENER) (30 minutes) 3. Discussion and Break (10-15 minutes depending on length of discussion) 4. Structural models (Michael Muskulus, NTNU) (20 minutes) 5. Power take-off systems (David Campos-Gaona, Strathclyde) (15 minutes) 6. Socio-economic and environmental impact (Niall Dunphy, UCC) (20 minutes) 7. Cost of energy modelling James Carroll, Strathclyde) (15 minutes) 8. Discussion and summing up (5 to 10 minutes)
0905	Whispers in the Wind: Ethical dimensions of social conflict in offshore wind - Rita V. D'Oliveira Bouman, SINTEF Ocean		The Sensitivity of Failure Definitions on Wind Turbine Failure Rate and Availability Estimates – Fraser Anderson, University of Edinburgh	
0920	Identifying and addressing societal aspects of offshore wind power in the North Sea – Tomas Moe Skjølsvold, Sara Heidenreich, NTNU		Multirotor wind turbine systems: an exploration of failure rates and failure classification – Jade McMorland, University of Strathclyde	
0935	From where the wind blows – The social dynamics of wind power opposition – Sigurd Hilmo Lundheim, NTNU		Effects of grid demand oscillations on degradation of power train system in offshore wind turbines – Farid Khazaeli Moghadam, NTNU	
0950	Just wind power? Mapping of Norwegian ownership models and decision-making processes – Kim-Andre Myhre Arntsen, NTNU		Support System for Optimised Maintenance of Horizontal Axis Wind Turbines – Arvind Keprate, OsloMet	
1005	Leveraging innovative technology to address societal interests in offshore wind farm development, Jan-Tore Horn, Vind Technologies AS		Technical modelling challenges for large idling wind turbines – Galih Bangga, DNV Services UK	
1020	Closing by chair		Closing by chair	
1030	Break			



Friday 20 January (cont.)

1100 Closing session – Strategic outlook

Chairs: John Olav Tande, SINTEF and Michael Muskulus, NTNU

1100 Introduction by Chair

1105 Strategic technology and innovation outlook on offshore wind; Jacob Edmonds, VC, ETIP Wind & Head of Innovation & Digital, Ørsted

1125 Techno-economical Optimization for Floating Offshore Wind Farms: A ScotWind Portfolio Study, Joanna Ines Martin, Ørsted Services AS

1145 Legal and regulatory aspects of offshore wind, Catherine Banet, professor, University of Oslo (UiO)

1205 Key innovations for floating wind cost reduction, Jose Luis Domínguez-García, Head of Power Systems Group, IREC

1220 Next generation floating wind technology, Knut Vassbotn, CEO, Deep Wind Offshore

1235 Advancements in offshore wind, Geir Olav Berg, SVP, Mainstream Renewable Power

1250 Poster award and closing

1300 Lunch & end of conference



Wednesday 18 January (1800-2000) and Thursday 19 January (1700-1900): Poster session

New turbine and generator technology

- A Computational Study Of H-shaped VAWT In Titled Condition, Poster #27, Otman Kouaissah, University of Bergamo
- Design and optimization of CRAFT mooring system under ULS conditions using DualSPHysics, Poster #55, Bonaventura Tagliaferro, UPC – Barcelona Tech
- Direct Drive Double Fed Wind Generator, Poster #58, Vlado Ostovic, Independent consultant
- High fidelity simulations of the OC4 Deepwind semi-submersible platform with single point mooring system configuration, Poster #65, Beatriz Mendez, CENER
- Vortex Filament Method 3D Analysis of Design Parameters for Counter-Rotating Axis Floating Tilted Turbine, Poster #89, Emil Lars Olav Andersson, Uppsala University
- New model for structural optimisation of airborne wind energy systems with rotary transmission, Poster #102, Jannis Wacker, DTU
- Aerodynamic response of a vertical axis wind turbine under prescribed floating motions, Poster #105, Mariana Montenegro, Politecnico di Milano
- Rotor and wake aerodynamic analysis of an offshore low specific rating rotor concept, Poster #138, Daniel Ribnitzky, University Oldenburg
- Start-Up Dynamics of Vertical Axis Wind Turbines: A Review, Poster #162, Taimoor Asim & Jaime Lough, Robert Gordon University
- Hydrodynamics of A Floating Offshore Wind Turbine Considering Directional Spreading Effects, Poster #164, Yuxi Lu, University of Western Australia
- Effect of a motion compensation strategy in reducing mooring line fatigue for floating wind turbines, Poster #240, Carlos Eduardo Silva De Souza, SINTEF Ocean
- Development of a Floating Offshore Baseline 25MW Rotor Design: Upscaling and Initial Multidisciplinary Integrated Design #242, Luca Oggiano, IFE

Grid connection and power system integration

- Numerical Modelling of a Hydro-pneumatic Energy Storage System for Smoothing Power Fluctuations from Offshore Wind, Poster #12, Andrew Bord, University of Malta
- Optimising the operation of wind powered electrolyzers, Poster #31, James Ferguson, Offshore Renewable Energy Catapult
- Development of a Power System model For Strathfarm, Poster #45, Matthew Cole, University of Strathclyde
- Emerging Power Quality Monitoring Technologies in Electric Grids Integrating Offshore Wind Energy: A Review, Poster #137, Han Shao, NTNU
- Open-Source High Fidelity Modelling and Validation of Type 5 Wind Turbine for Grid Integration, Poster #188, Juan Calderon, Idaho National Laboratory
- System Identification of a MIMO Black-box Model Using Vector Fitting, Poster #227, Andrew Smith, SINTEF Energy Research
- Impedance Modelling of Three-Core Armoured Cables, Poster #231, Bjørn Gustavsen, SINTEF Energy Research
- Towards market integration by wind farm operation scheduling, Poster #236, Kristin Serck-Hanssen/Hanna Birgitte Sletta, NTNU
- Towards Optimal Utilization of Grid Capacity for Connection of New Renewable Power Plants in Norway, Poster #237, Torbjørn Indrekvam Horstad, NTNU



Met-ocean conditions

- Assessment of Turbulence Intensity Estimates from Floating Lidar Systems, Poster #4, Felix Kelberlau, Fugro Norway AS
- Semi-analytical load models describing the progressive immersion of a fixed vertical cylinder in breaking waves, Poster #13, Paul Renaud, France Energies Marines
- Machine learning for predicting offshore wind speed vertical profiles, Poster #30, Hugo Rubio, Fraunhofer IWES
- Assessing wind turbulence intensity and radial velocity uncertainties using a lidar simulator, Poster #32, Francisco Garcia, University of Stuttgart
- Characterization of the power performance of a wind turbine inside a wind farm, Poster #37, Alessandro Sebastiani, DTU
- Numerical investigation of breaking focused wave-induced loads on floating offshore wind turbines, Poster #43, Marc Martin, France Energies, Marines
- Overview of the potential of floating wind in Europe based on metocean-data derived from ERA5-dataset, Poster #46, Thomas Messmer, University of Oldenburg
- A multi-decadal perspective on atmospheric stability for offshore wind energy, Poster #49, Daniel Hatfield DTU Wind
- Turbulence estimation by Dual-doppler scanning lidars, Poster #51, Robert Menke, DNV
- LIKE: "Lidar Knowledge Europe" is a European Doctoral Research and Training Network, Poster #60, Charlotte Hasager, DTU Wind and Energy Systems
- DNORA: an open-access tool for high resolution dynamical downscaling of ocean waves, Poster #67, Konstantinos Christakos, NTNU & MET Norway
- The contribution of Aeolus observations to surface wind forecast over high latitude regions, Poster #88, Haichen Zuo, DTU Wind and Energy Systems
- Application of ship-based floating lidar measurements for offshore wind resource characterization, Poster #90, Hugo Rubio, Fraunhofer IWES
- Short-term power prediction with the engineering models during the transient event, Poster #94, Maria Krutova, UiB
- Improve wind lidars for wind energy, Poster #104, Liqin Jin, Technical University of Denmark
- Inflow Turbulence Characterization using Nacelle-lidar Measurements, Poster #108, Wei Fu, Technical University of Denmark
- Inflow characterization using proper orthogonal decomposition based on nacelle lidar measurement on Floating Wind Turbine, Poster #139, Dexing Liu, University of Stuttgart
- Environmental design parameters for the Norwegian offshore wind leases, Poster #150, Lars Frøydy, 4Subsea
- A simple spectral representation of large-scale longitudinal rolls in the convective atmospheric boundary layer, Leonardo Alcayaga, DTU Wind and Energy Systems
- Implementation of a Simple Actuator Disk for Large Eddy Simulation (SADLES) in the WRF Model, Poster #166, Hai Bui, UiB
- Correction of meteorological mast wind speed using LiDAR observation and selective-bandwidth, Poster #167, Hai Bui, UiB
- H2020-MSCA-ITN project Lidar Knowledge Europe (LIKE) ESR13 study: Wind Lidar Technology for Bridge Engineering, Mohammed Nafirsifard, UiS
- Lidars for Wind Tunnels, Poster #173, Shahbaz Pathan, Technical University of Denmark
- Cluster wake representation in engineering models and effects on wind turbine loads, Poster #177, Ariun Anantharaman, University of Oldenburg
- Nacelle LIDAR Based Yaw Misalignment Estimation, Poster #179, Zhaouyu Zhang, Politecnico di Milano
- Wind simulation and lidar measurements in complex terrain, Poster #184, Isadora Limas Coimbra, University of Porto
- Assessment of wind conditions relevant for airborne wind energy applications, Poster #189, Jan Markus Diezel, UiB
- Normalized-wake characterization by long-range lidars, Poster #190, Priscilla Mulattieri Suarez Orozco, UL International GmbH
- Characterization of Turbulence at Exposed Airports by Lidar Measurements and Model Simulations, Poster #196, Sai Wang, UiB
- Improving wind farms parametrisations in the Weather Research and Forecasting model, Poster #197, Oscar Manuel Garcia Santiago, DTU



Operation and maintenance

- Lidar based virtual load sensors for mooring lines using artificial neural networks, Poster #59, Moritz Gräfe, Stuttgart University
- Yaw control strategies for a 20 MW multi-rotor wind turbine system, Poster #74, Tobias Eichelmann, HAW Hamuburg
- Dynamic moisture diffusion in transformer winding insulation, Poster #86, Eirill B. Mehammer, SINTEF Energy Research
- Modeling combined aerodynamic effects of leading edge erosion in offshore wind farms, Poster #99, Jens Visbeck, Technical University of Denmark
- BEM approach to evaluate leading-edge erosion effects on wind turbine power output, Poster #126, Muhammad Salman Siddiqui, NMBU
- Estimating the blade roughness effect on wind turbine performance and wake dynamics, Poster #128, Muhammad Salman Siddiqui, NMBU
- Investigation on the effect of prescribed coupled motions on the power production of a FOWT, Poster #151, Riccardo Ramponi, Politecnico di Milano & TU Delft
- The Digital Twin Framework for Wind Energy Applications, Poster #195, Florian Stadtmann, NTNU
- Three applications of thermography on wind turbine rotor blades, Poster #201, Michael Stamm, Bundesanstalt für Materialforschung und -prüfung
- Cost beneficial floating maintenance and major component exchange solution for semi-submersible foundations, Poster #209, Andreas Buvarp Aardal, Fred Olsen
- Machine Learning for Automated Coating Monitoring, Poster #239, Robin Vacher, SINTEF

Substructures and mooring

- Multidisciplinary Design Analysis and Optimisation of Floating Offshore Wind Turbine Substructures- Coupled System Solution Strategies, Poster #10, Katarzyna Patryniak, University of Strathclyde
- Time-domain Floater Stress Analysis for a Floating Wind Turbine, Poster #20, Zhen Gao, NTNU
- Surrogate based sensitivity analysis and uncertainty quantification of floating wind turbine mooring systems, Poster #44, Vinit Vijay Dighe, TNO
- Nylon Fibre Ropes for the Mooring of Floating Wind Turbines, Poster #62, Stian Høegh Sørum, SINTEF Ocean
- A coupled aero-hydro-elastic and structural analysis of the 15 MW UMaine VoltornUS-S floating wind turbine, Poster #72, Maria Prodromou, ORE Catapult
- Efficiency and perspective of laser-arc hybrid welding for offshore structure production, Poster #77, Ivan Bunaziv, SINTEK
- Numerical Investigation of Mooring System Design and Scaling Trends of Large Floating Wind Turbines, Poster #81, Serag-Eldin Abdelmoteleb, NTNU
- Effect of body motion on the wave loads computed with CFD on the INO-WINDMOOR floater, Poster #98, Andrea Califano, SINTEF Ocean
- Nonlinear Modelling of Shared Mooring Concepts for floating offshore wind turbines, Poster #134, Qi Pan, University of Stuttgart
- Dynamic analysis of a 10 MW TLP floating wind turbine considering substructure flexibility, Poster #192, Xiaming Ran, NTNU
- Sensitivity Analysis of the effect of damping coefficients on floating substructures loads, Poster #205, Likhitha Ramesh Reddy, Delft University of Technology
- Pile design for X-rotor offshore wind turbine, Poster #214, Jing Dong, NTNU
- Identification of viscous heave plate effects for a floating wind turbine substructure and investigations of parameters influencing quadratic transfer functions, Poster #???, Synne H. Nybø, SINTEF

Marine operations and logistics

- Kongsberg Digital - Kognitwin digital twin for the full life cycle of offshore wind, Poster #40, Håvard Paulshus, Kongsberg Digital



- An experimental study of the towing characteristics of a semi-submersible floating offshore wind platform, Poster #109, Rahul Chittf Ramachandran, MARIN
- Mitigation of assembly constraints for floating wind foundations using discrete event simulation, Poster #110, Ben Moverly Smith, IDCORE, Xodus Group
- Weather Window Analysis for Offshore Renewable Energy Assets, Poster #120, Andrew Joseph, University of Strathclyde
- Quick assessment of semi-submersible floating offshore wind turbines under misaligned wind, wind-wave and swell-wave loading, Poster #133, Joep van der Spek, Siemens Gamesa Renewable Energy
- Initial study of application of CFD on VIM of semi-submersible FOWT, Poster #144, Fengjian Jiang, SINTEF Ocean AS
- Maritime logistics optimisation for predictive maintenance at offshore wind farms, Poster #221, Elin Espeland Halvorsen-Weare, SINTEF Ocean
- Upending of Spar type FOWT in waves: A numerical comparison with time-domain and frequency-domain solvers, Poster #228, Sithik Aliyar, Technical University of Denmark

Wind farm optimisation

- Autoencoders and Neural-ODE based reduced order model for high-Reynolds flow around wind-turbine blade, Poster #6, Mandar Tabib, SINTEF
- Integrated Design and Optimization of a 5MW Spar FOWT, Poster #7, Rigobert Zomafo, University of Aberdeen
- Relative Dynamic Blade pitch misalignment detection using TripleCMAS and Visual Inspection, Poster #22, Xavier Tolron, Ventus Engineering GmbH
- Shock detection using TripleCMAS, Poster #23, Tim Gazdic Ventus Engineering GmbH
- Rotor Imbalance, Poster #24, Xavier Tolron, Ventus Engineering GmbH
- Rotor rotational speed detection and rotor overspeed alarm using TripleCMAS , Poster #25, Xavier Tolron, Ventus Engineering GmbH
- System Dynamics and Learning effects on Offshore Wind Deployment and Operations, Poster #42, Gerardo Perez-Valdes, SINTEF
- Optimization of offshore wind turbine positioning within bounded areas under uncertain wind conditions, Poster #63, Per Pettersson, NORCE
- Rational simplification of high-fidelity wind turbine models used for mooring analysis, Poster #70, Arnt Gunvald Fredriksen, Entail AS
- Investigation of the influence of internal waves on a SPAR buoy structure, Poster #125, Vivien Maertens, University of Bath
- Modelling steady state motion and flow of floating offshore wind farms for design optimization, Poster #145, Ju Feng, Technical University of Denmark
- Upwards wake deflection effect on a 12MW semisubmersible considering non-neutral atmospheric conditions, Poster #154, Riene Rivera Arreba, NTNU
- Cost and risk optimization of an offshore wind power plant collection grid considering compliance aspects, Poster #181, Ramon Abritta, NTNU
- Efficient reduced order modelling approximation of turbulent flow around geometrically-parametrised wind-turbine blades, Poster #186, Vasileios Tsiolakis, NTNU
- Assessing cluster wake description of engineering model with SCADA and in-situ flight data, Poster #219, Gabriele Centurelli, University of Oldenburg
- Study of loads and wake effects for floating wind turbines under low-level jet events, Poster #222, Fahim Masud Ahmed, Geophysical Institute
- Layout and yaw optimisation of an offshore wind farm, Poster #238, Daniel Sukhman, Technische Universität Braunschweig
- A simulation platform for complex, large-scale modular energy systems, Poster #241, Tobias Meyer, Fraunhofer IWES
- A Reinforcement Learning framework for Wake Steering of Wind Turbines, Poster #245, M. Tabib, SINTEF
- CONWIND – research on smart operation control technologies for offshore wind farms, Poster #246, Yngve Heggelund, NORCE



Experimental testing and validation

- CFD simulation of 10MW FOWT aerodynamic-hydrodynamic load analysis, Poster #28, W. Tongphong, Korea Maritime and Ocean University
- Wind tunnel hardware-in-the-loop experiments about the global response of a 15 MW floating wind turbine, Poster #91, Alessandro Fontanella, Politecnico di Milano
- Technology development and design improvements for an innovative floating wind mooring component, Poster #115, Faryal Khalid, University of Exeter
- Influence of main bearing model fidelity on the system behaviour of WT drivetrain MBS models, Poster #117, Vitali Züch, RWTH Aachen University
- Experimental and numerical study on wave diffraction by a circular cylinder with a heave plate, Poster #142, Seung-Yoon Han, Ecole Centrale Nantes
- Experimental investigation of yawed multirotor wind turbine wakes, Poster #187, Jan Bartl, HVL
- How the full-scale floating offshore test turbine Zephyros near Utsira, can escalate technology implementation, Poster #204, Anouk-Letizia Firle, SUSTAINABLE ENERGY AS
- Experimental comparison of mooring loads and responses for floating offshore wind structures using conditional waves, Poster #210, Aminda Marlen Titlestad Ripe & David Lande-Sudall, Western Norway University of Applied Sciences
- Experimental time-domain comparison of a hydrodynamic model for a lightly moored spar buoy wind turbine, Poster #218, David Lande-Sudall, Western Norway University of Applied Sciences
- Data-driven modelling of linear and quadratic transfer functions of floating structures – David Stamenov, Aarhus University

Wind farm control systems

- Design and simulation of Control system for Counter Rotating Axis Floating Tilted Turbine, Poster #48, Hans Bernhoff, World wide wind
- Distributed Multi-Agent Control for Offshore Floating Inter-Turbine-Grid, Poster #97, Christos Verginis, Uppsala University
- The performance of two control systems for floating wind turbines: lidar assisted feedforward and multivariable feedback, Poster #155, Feng Guo, Flensburg University of Applied Sciences
- A FAST.Farm and MATLAB/Simulink Interface for Wind Farm Control, Poster #168, Coen-Jan Smits, TU Delft
- Damage-aware distributed wind farm control with farm-scale turbulence and wake effects, Poster #233, Spyridon Chapaloglou, SINTEF

Societal impact and controversies

- Energy Transitions and the Media: how shocks shape framings of Norwegian offshore wind power, Poster #54, Birgitte Nygaard, NTNU
- Cost-efficient Multi-Use Windpower and Fish farming: From concept idea to sea demonstration in ten years, Poster #224, Jan Erik Hanssen, 1-tech BV
- Towards a comprehensive understanding and assessment of Offshore Energy Hubs: An evolutionary perspective – Marianne Petersen, DTU



Environmental Impact and Regulatory Framework

- Environmental impact of Counter Rotating Axis Floating Tilted Turbines, Poster #66, Anke Bender, Uppsala University
- Planning the Installation of Marine Renewable Energies. A support tool for decision-making applied to Portugal, Poster #113, Teresa Simões, LNEG
- Co-creating Sustainability Readiness Levels through a balanced and all-inclusive societal-environmental and technological approach, Poster #206, Roel May, NINA
- Gone With the Wind? Wind Farm-Induced Wakes and Regulatory Gaps, Poster #208, Eirik Finserås, UiB