

TWIND Online Summer School

Program

5th – 9th July, 2021

		05/07/2021 - Monday	06/07/2021 - Tuesday	07/07/2021 - Wednesday	08/07/2021 - Thursday	09/07/2021 - Friday
<i>Morning Session</i>	10:50 - 11:00	Welcome				
	11:00 - 11:15	Richard P. Dwight C-KN1	Miren J. Sánchez Lara G-KN1	Jan-Willem van Wingerden B-KN1	Donatella Zappala H-KN1	Paul McKeever D-KN1
	11:15 - 11:30					
	11:30 - 11:45	C - SP1	Iñigo Mendikoa G-KN2	B - SP1	H - SP1	Francesco Boscolo Papo D-KN2
	11:45 - 12:00	C - SP2		B - SP2	H - SP2	
	12:00 - 12:15	C - SP3	Q&A	B - SP3	H - SP3	D - SP1
	12:15 - 12:30	Q&A		Q&A	Q&A	Q&A
Lunch (12:30 - 14:00)						
<i>Afternoon Sessions</i>	14:00 - 14:15	Axelle Viré A-KN1	G - SP1	Ad van Wijk E-KN1	H - SP4	D - SP2
	14:15 - 14:30		G - SP2		H - SP5	D - SP3
	14:30 - 14:45	Guilherme N. Vasconcelos Vaz A-KN2	G - SP3	E - SP1	Q&A	Q&A
	14:45 - 15:00		Q&A	Q&A	Sara Muggiasca F-KN1	Rodrigo Rojas I-KN1
	15:00 - 15:15	Q&A	G - SP4	E - SP2		
	15:15 - 15:30	A - SP1	G - SP5	E - SP3	F - SP2	J - SP1
	15:30 - 15:45	A - SP2	G - SP6	E - SP4	F - SP3	J - SP2
	15:45 - 16:00	A - SP3	Q&A	Q&A	Q&A	Q&A
	16:00 - 16:15	Q&A				

Key	
Aerodynamics - A	Experimental Methods - F
Control Systems - B	Hydrodynamics - G
Data-driven Modelling - C	Operations and Maintenance - H
Electrical systems - D	Offshore Wind Potential - I
Energy Storage & Hydrogen - E	Project Management/Farm Design - J

Abbreviations
KN - Keynote
SP - Short Presentation

Program

Please note that Keynotes (KN) will be for a duration of 30 mins and short presentations (SP) for a duration of 15 mins.
A combined Q&A will be held at the end of the session. We request all speakers to please stay until the Q&A for the corresponding session.

Aerodynamics - A			
Type	Presenter	Affiliation	Title
A - KN1	Axelle Viré	TU Delft	Floating offshore wind energy at TU Delft
A - KN2	Guilherme N.	Wavec	Aerodynamics of Offshore Wind Turbines
A - SP1	Ricardo Amaral	TU Delft	Aerodynamics of floating offshore wind turbines undergoing large motions
A - SP2	Claudia Muscari	TU Delft, Polimi	On the free stream velocity sampling in AL Models: review and assessment with respect to wake description
A - SP3	Marinos Manolesos	Swansea University	Thick airfoils, Vortex Generators, Gurney Flaps and Flatback Solutions: How to get better performance out of the blade inner region?

Control Systems - B			
Type	Presenter	Affiliation	Title
B - KN1	Jan-Willem van Wingerden	TU Delft	Smart wind farms
B - SP1	Javier Lopez	Tecnalia	Floating offshore wind turbine vibration control
B - SP2	Michael Smailes; Ampea Karikari-Boateng	ORE Catapult	Wind Turbine & Wind Farm Control
B - SP3	Daniel van den Berg	TU Delft	Enhanced Wake-Mixing with Floating Offshore Wind Turbines

Data-driven Modelling - C			
Type	Presenter	Affiliation	Title
C - KN1	Richard P. Dwight	TU Delft	Data-driven approaches to physical modelling in CFD in CFD
C - SP1	Craig White	Wavec Offshore Renewables	Techno-economic assessment of floating offshore wind turbines to reduce LCOE
C - SP2	Deepali Singh	TU Delft	Data driven surrogate modeling for load prediction on offshore wind turbines
C - SP3	YanghaoZhong	University of Warwick	Biorthogonal wavelet compression of one-dimensional wind speed data

Electrical systems - D			
Type	Presenter	Affiliation	Title
D - KN1	Francesco Boscolo Papo	Tecnalia Research and Innovation	Design of dynamic cable for floating platforms
D - KN2	Paul McKeever	ORE Catapult	The changing role of electrical systems in the offshore wind sector
D - SP1	Will Brindley	ORE Catapult	Dynamic Cable Design
D - SP2	Pan Fang	Delft University of Technology 3ME	Bending test of dynamic power cables
D - SP3	Manuel Rentschler	WavEC Offshore Renewables	Dynamic cable research at WavEC – Layout optimization & bending experiments

Energy Storage & Hydrogen - E			
Type	Presenter	Affiliation	Title
E - KN1	Ad van Wijk	TU Delft	Hydrogen the global zero carbon energy carrier
E - SP1	Andre Novgorodcev	TU Delft	Development of a Underwater Gravity Energy Storage (UGES) concept for offshore applications.
E - SP2	Omar Ibrahim	University College Cork	Coupling Floating Offshore Wind Turbine Farms with Green Hydrogen Production and Transportation
E - SP3	Dr. John Nwobu	Offshore Renewable Energy Catapult	Battery Energy Storage in Offshore Wind Farms
E - SP4	Dr. John Nwobu	Offshore Renewable Energy Catapult	Towards Achieving Net Zero: Green Hydrogen from Offshore Wind

Experimental Methods - F			
Type	Presenter	Affiliation	Title
F - KN1	Sara Muggiasca	Politecnico di Milano	Experimental tests on FOWT models
F - SP1	Ander	Tecnalia	Wave overtopping of a fixed vertical cylinder: modelling and parametric analysis
F - SP2	Felipe Novais	Politecnico di Milano	A Hardware-in-The-Loop System for Model Testing of Floating Offshore Wind Turbines in a Wind Tunnel
F - SP3	Alejandro Jimenez del Toro	ÉireComposites Teo.	Automated tape placement of carbon fibre reinforced thermoplastics for offshore wind turbine blades

Hydrodynamics - G			
Type	Presenter	Affiliation	Title
G - KN1	Miren J. Sánchez Lara	Tecnalia R&I	Challenges in the hydrodynamics modelling of FOWT
G - KN2	Iñigo Mendikoa	Tecnalia Research & Innovation	Mooring System Design for Floating Platforms
G - SP1	Federica Perassi	TU Delft	Fluid structure interaction between vertical-axis tidal turbine and floating structure
G - SP2	Manuel Rentschler	WavEC Offshore Renewables	CFD code comparison, verification and validation for a floating wind semi-submersible platform
G - SP3	Likhitha Ramesh Reddy	Delft University of Technology	Hydrodynamic modeling of floating offshore wind turbines
G - SP4	Alistair Lee	Offshore Renewable Energy Catapult	Mooring System Design
G - SP5	Will Brindley	ORE Catapult	Floating Offshore Wind design and modelling
G - SP6	Razieh Jalal Abadi	University College London	Large Eddy Simulation of open-channel flow over square bars at different Reynolds numbers

Operations and Maintenance - H			
Type	Presenter	Affiliation	Title
H - KN1	Donatella Zappalá	TU Delft	Optimization of Wind Farm Maintenance: Reliability and Condition Monitoring
H - SP1	Amorina Gonzalez Armayor	WavEC	Including O&M in the design of a device, platform and windfarm
H - SP2	Rahul Chitteth Ramachandran	University College Cork, Ireland	Installation, O&M and decommissioning challenges
H - SP3	Mário Alberto Vieira	+ATLANTIC CoLAB	Introducing O&M in Marine Energy Technologies
H - SP4	Mingxin Li	TU Delft	An optimized opportunistic maintenance strategy for offshore wind farms
H - SP5	Chunjiang Jia	ORE Catapult	Data-driven modelling for power module condition monitoring

Offshore Wind Potential - I			
Type	Presenter	Affiliation	Title
I - KN1	Rodrigo Rojas	National University of Costa Rica	Offshore wind potential in Costa Rica: Boosting a plan towards road map

Project Management/Farm Design - J			
Type	Presenter	Affiliation	Title
I - SP1	Amorina Gonzalez Armayor	WavEC	The use of project management to reduce costs
I - SP2	Matteo Baudino Bessone	Delft University of Technology	Review on floating offshore wind farm design: identification of the interactions between subsystems