Time	Duration	Type	Title	Speaker/Organizer	Organization
DAY 1 (Tuesday 3 December 2024)					
8:15-9:00	45'	Registration			
9:00-9:20	15'	**0 - Welcome and conference overview**		Frederik Zahle	
9:20:10:05	**45'**	**Keynote 1**	Grand challenges and opportunities for systems engineering	Katherine Dykes	Aegir Insights
10:05-10:45	**40'**	**1 - Political, economical, social and environmental considerations**		Chair: Thanasis Barlas	
	20'	Talk 1	Combined economic-environmental design of offshore wind farms	Samuel Kainz	TUM
	20'	Talk 2	The implications of non-price criteria in offshore wind: carbon footprint and circularity	Aje Rihel	Esgian
10:45-11:05	20'	Coffee break			
11:05-12:25	**90'**	**2 - Upscaling perspectives across the full system and supply chain**		Chair: Garrett Barter	
	20'	Talk 1	Trade-offs in turbine upsizing and their impact on wind energy's commercial future	Philipp Beiter	NREL
	20'	Talk 2	Wind turbine growth: perspectives and de-risk strategies for developers	Matteo Capaldo	Total Energies
	20'	Talk 3	Scaling new heights: the certification perspective on wind turbine growth	Johan Olaison	DNV
	20'	Talk 4	Wind Turbine Upscaling Perspectives and Floating Wind Innovations	Kong Long	Ming Yang
12:25-13:25	1h	Lunch			
13:25-14:45	**90'**	**3 - Innovation in turbine design, new concepts**		Chair: Kenneth Lønbæk	
	20'	Talk 1	Beyond power and loads: modeling the impacts of active load control and wake steering on CAPEX, OPEX, and LCOE	Todd Griffith	UT Dallas
	20'	Talk 2	Wind turbine flap technology development – From laboratory to full scale testing	Helge Aagaard Madsen	DTU
	20'	Talk 3	Beyond 15-MW for generator technology	Garrett Barter	NREL
	20'	Talk 4	The Hybrid-Lambda rotor design and control methodology - enabling low-specific-rating offshore wind energy	Daniel Ribnitzky	U Oldenburg
14:45-15:05	20'	Coffee break			
15:05-15:45	**40'**	**4 - Software talks**		Chair: Frederik Zahle	
	20'	Talk 1	The future of Bladed, an aero-elastic tool designed for automation and use at scale - How to meet the needs of the modern digital world simulation	Diogo Samora Cerqueira	DNV
	20'	Talk 2	Large-scale multidisciplinary design optimization under uncertainty using graph-based modeling	John Hwang	University of California San Diego
15:45-16:55	**70'**	**5 - IEA Wind Activities**		Chair: Frederik Zahle	
	20'	Talk 1	Status of new IEA Task 55 Reference Wind Plant made of 22MW wind turbines	Julian Quick, Samuel Kainz	DTU, TUM
	30'	Talk 2	WindIO panel discussion	Julian Quick, Kenneth Lønbæk	DTU
	20'	Talk 3	IEA Wind Task 57: Wind Energy Joint Assessment of Models (Wind JAM)	Niels Troldborg	DTU
DAY 2 (Wednesday 4 December 2024)					
9:00-9:10	10'	**0 - Day 2 Welcome and conference overview**			
9:10-9:55	**45'**	**Keynote 2**	**System integration - a solution to renewable energy**	José Blasques	Vattenfall
9:55-11:15	**90'**	**6 - Machine-learning and AI, digital twins, digitalization**		Chair: Julian Quick	
	20'	Talk 1	TWAIN: Advancing Wind Farm Control through AI-Driven Multidisciplinary Process Modelling and Data Integration	Tuhfe Göçmen	DTU
	20'	Talk 2	Innovative winds: digital twins and ML at Siemens Energy	Jeppe Funk Kirkegaard	SGRE
	20'	Talk 3	Generation of synthetic SCADA signals using cGANs for enhanced wind turbine fault detection and prognosis	Ali Eftekhani Milani	TU Delft
	20'	Talk 4	US DOE priorities for investment in AI & systems engineering	Shreyas Ananthan	US DOE
11:15-11:35	20'	Coffee break			
11:35-12:55	**90'**	**7 - Floating wind**		Chair: Thanasis Barlas	
	20'	Talk 1	Holistic design experiences in floating wind turbine	Michael Borg	Stiesdal
	20'	Talk 2	Optimizing floating wind turbine design: the role of tower eigenfrequency in dynamic loads	Rafael Madureira	Principle Power
	20'	Talk 3	Optimization of FOWT Designs: QBlade in the WEIS	Robert Behrens de Luna	TU-Berlin
	20'	Talk 4	Validating floating wind O&M numerical models vs real data: status, approach and outlook	Paul Watissee	PeakWind
12:55-13:55	1h	Lunch			
13:15-14:45	**90'**	**8 - Systems engineering at the wind farm level**		Chair: Garrett Barter	
	20'	Talk 1	Plant Design System Engineering	Ewan Machefaux	Vestas
	30'	Talk 2	How we engineer the system at Shell	Sebastian Sanchez	Shell
	20'	Talk 3	Floating wind array ontology and modeling framework	Leah Sirkis	NREL
	20'	Talk 4	Towards wind farm design accounting for uncertainties	Pierre Elouan Rethoré	DTU
14:45-16:05	**90'**	**9 - Wind-based hybrid power plants**		Chair: Julian Quick	
	20'	Talk 1	Dispatchable power from wind: the case of baseload hybrid power plants	Jenna Iori	TU Delft
	20'	Talk 2	HyDesign and applications	Juan Pablo Murcia	DTU
	20'	Talk 3	Wind turbine design for hydrogen production	Jared Thomas	NREL
	20'	Talk 4	Designing hybrid power plants	Michiel Goderie	Vattenfall
16:05-16:25	20'	Coffee break			
16:25-16:55	**40'**	**10 - Software talks**		Chair: Frederik Zahle	
	20'	Talk 1	WEIS and FAST.Farm: Advancements Beyond Wind Turbine Aero-Elasticity	Jason Jonkman	NREL
	20'	Talk 2	From PyWake to Dynamiks	Mads Mølgaard	DTU
16:55-17:10	15'	Workshop Debrief		Frederik Zahle	
DAY 3 (Thursday 5 December 2024)					
8:00-12:00	4h	**Tours and code tutorials**			
12:00-13:00	1h	**Lunch outside the workshop auditorium**			