WEDNESDAY 8 JUNE

The program is subject to change.

08.00 – 09.00 REGISTRATION AND COFFEE

09.00 – 10.00 OPENING SESSION

*Associate Professor **Stefan Ivanell**. Gotland University*
*Professor **Jens N. Sorensen**. Technical University of Denmark*

10.00 – 11.00 STABILITY AND TURBULENCE

*Dr. **Thomas Leweke.** CNRS, IRPHE, Marseille, France*
Spatio-temporal development of the pairing instability in helical vortices

*Industrial PhD Student **Rolf-Erik Keck**. Vestas wind systems & Risø DTU*
Investigation of prescribed wind shear and synthetic atmospheric turbulence for rotor wake simulations

*M.Sc. **Sasan Sarmast**. Linne Flow Centre, KTH Mechanics*
Analysis of wind turbine flow structure using Koopman mode decomposition technique

11.00 – 11.20 COFFEE BREAK

11.20 – 12.00 STABILITY AND TURBULENCE

*PhD Student **Søren Juhl Andersen.** Technical University of Denmark*
Low Order Numerical Model of the Inherent Wake Behind an
Infinitely Long Row of Wind Turbines

*Phd Student **Ylva Odemark.** Linne Flow Centre, KTH Mechanics*
An Experimental study on wake evolution and trailing vortex instabilities

12.00 – 13.30 LUNCH

13.30 – 14.30 WAKE SIMULATIONS

*Associate Professor **Bahri Uzunoglu.** Gotland University*
Benchmarking of eddy viscosity model in different atmospheric turbulence settings.

*Research engineer **Ivan Dobrev.** Arts et Métiers-ParisTech, Paris, France*
Actuator surface numerical model for simulation of wind turbine wakes

*Research Scientist **Pierre-Elouan Réthoré.** Risø DTU*
Comparison of the close wake of different kinds of wind turbine CFD models

14.30 – 14.50 COFFEE BREAK

14.50 – 16.10 WIND FARMS

*Senior Scientist **Gunner Chr. Larsen**. Risø-DTU*
TOPFARM – a platform for wind farm topology optimization

*Mr. **Jonathon Sumner.** École de technologie supérieure*
Prediction of wake effects on wind farm power production using a RANS approach. Part I. Complex terrain: Case studies from Spain

*Dr. **Peter Eecen.** ECN Wind Energy - Group Aerodynamics*
Offshore wind farms: losses and turbulence in wakes. Modeling and validation

*Dr **Gillian Smith.** WindFarmer Specialist, GL Garrad Hassan*
Practical Application of Wake Modelling in Large Wind Farm Energy Prediction

16.10 – 16.20 REFRESHMENTS

16.20 – 17.40 WAKE INTERACTION

*Dr. **Helge Aagaard Madsen**. Risoe DTU.*
Modelling merging wakes with three different approaches

*Reserch Scientist **Niels Troldborg**. Risoe DTU.*
Experimental and numerical investigations of wind turbine wake deficit and loads in partial wake operation

*Senior Site Assessment Engineer **Giorgio Crasto**. WindSim AS*
Wake Modeling with the Actuator Disc concept

*Senior scientist **Torben J. Larsen,** Risoe DTU,*
Evaluation of the Dynamic Wake Meander Model for Loads and Power Production at the Egmond aan Zee Wind Farm

20.00 DINNER

THURSDAY 9 JUNE

08.00 – 09.00 IEA WAKEBENCH MEETING

For wakebench participants

09.00 – 10.00 MEXICO

Mr. ***Konrad Meister.*** *Institute of Aerodynamics and Gas Dynamics (IAG), University of Stuttgart, Germany*
Grid dependency studies on tip vortex preservation in wind turbine CFD simulations

Associate Professor ***Wen Zhong Shen****. Technical University of Denmark*
Actuator Line / Navier Stokes Computations for Flows past the Yawed MEXICO Rotor

Professor ***Niels N. Sørensen****. Wind Energy Division, Risø-DTU*
Near Wake Predictions Behind the MEXICO Rotor in Axial and Yawed Flow Conditions

10.00 – 10.20 SHORT POSTER PRESENTATION

10.20 – 11.00 POSTER SESSION WITH COFFEE

11.00 – 12.00 MEXICO

PhD, Research Associate ***Simon-Philippe Breton.*** *École de techologie supérieure*
Numerical Analysis of the Vorticity Structure of the MEXICO Rotor in the Near Wake

PhD ***Robert Szasz****. Lund University*
LES of the near wake of the MEXICO wind turbine

PhD Student ***Karl Nilsson.*** *Gotland University*
Wake behind the MEXICO rotor

12.00 – 13.30 LUNCH

13.30 – 14.50 MEASUREMENTS OF WAKES

Senior Scientist ***Kurt S. Hansen.*** *Department of Mechanical Engineering,Technical University of Denmark*
Determination of near wake characteristics behind a wind turbine

Mr. ***Michael Sherry.*** *Fluids Laboratory for Aeronautical and Industrial Research, Monash University, Victoria 3800*
The affect of wind turbine nacelle geometry on near wake structure

*Associate Professor **Robert Mikkelsen** Department of Mechanical Engineering, Technical University of Denmark*
Wake measurement using PIV on a scaled Glauert optimal turbine rotor in a water flume

*Dr. **Davide Medici.** Garrad Hassan Italia srl*
Field measurements from an 80 m mast in the wake of V44 turbines in Italy

14.50 – 15.10 COFFEE BREAK

15.10 – 16.50 VORTEX MODELLING

*Professor **Philippe Chatelain.** Université catholique de Louvain*
Hybrid vortex methods with immersed lifting lines applied to the LES of wind turbine wakes

*Mr. **Björn Montgomerie.** Div of Fluid Dynamics, Dept of Applied Mechanics, Chalmers University of Technology, Gothenburg, Sweden*
A contribution to wind turbine wake dynamics algorithms

*Professor **Gijs van Kuik.** Duwind, TU-Delft*
The ideal (?) wake of an ideal actuator disc

*PhD Student **Frank Scheurich.** University of Glasgow*
Simulating Wake Interactions of Vertical-Axis Wind Turbines

*Dr. **Carlos Simao Ferreira**. TU Delft - DUWIND*
Proving that power and instantaneous loads are decoupled on a 2D VAWT

16.50 – 17.20 CLOSING SESSION