

iTi CONFERENCE ON TURBULENCE VIII

workshop on Turbulent aspects in wind-energy

September 4th, 2018 | Bertinoro, Italy

time	Monday (3 th of September)
19:00	Welcome buffet - Registration

time	Tuesday (4 th of September)
08.45	Registration
	Session Wind 1 – Chair: Peinke
9:00	Welcome
9:10	Invited talk: Wind Turbine Response to Atmospheric Turbulence across Scales: Simulation and Experiment, J. Brasseur <i>page 3</i>
9:50	Wind Turbine Simulations with OpenFOAM, M. E. Hoem , R. Kristoffersen <i>page 4</i>
10:10	An analytical model for the effect of vertical wind veer on wind-turbine wakes, M. Abkar , J.N. Sørensen and F. Porté-Agel <i>page 6</i>
	Coffee break (10:30-11:00)
	Session Wind 2 – Chair: Schmitt

time	Tuesday (4 th of September)
11:00	Invited talk: Morphology and moment-based descriptions of the wind plant boundary layer, R.B. Cal <i>page 7</i>
11:40	Actuator line model predictions of turbulent wakes B. Rocchio , U. Ciri, M. V. Salvetti, S. Leonardi <i>page 8</i>
12:00	Turbulent features of wakes behind a turbine, I. Neunaber, D. Bastine and J. Peinke <i>page 10</i>
	Lunch (12:20 – 14:00)
	Session Wind 3 – Chair: Brasseur
14:00	Invited talk: Investigation of turbulence accuracy when modeling wind in forest using CFD, St. Ivanell <i>page 11</i>
14:40	The near-field of a lab-scale wind turbine in tailored turbulent shear flows, L. Li , R. J. Hearst and B. Ganapathisubramani <i>page 13</i>
15:00	The relationship between vortex pairings and the recovery of the velocity deficit in a wind turbine wake K. Kimura , Y. Tanabe ² , T. Aoyama, Y. Matsuo, and M. Iida <i>page 15</i>
	Coffee break (15:20-16:00)
	Session Wind 4 – Chair: Cal
16:00	Invited talk: Wind energy scaling intermittency: its relation with the turbulence input, and its small-scale prediction, F. Schmitt , R. Calif, O.D. Medina <i>page 17</i>
16:50	Application of two-dimensional multifractal fractional Brownian motion to mesoscale wind power generation and synthetic climate change, M. Janum and M. Greiner <i>page 18</i>
17:00	Aerodynamics of an airfoil subjected to icing M. K. Vinnes , L. Li, R. J. Hearst <i>page 19</i>
17:20	Formation Mechanism of the Low-level Jets: A DNS Study of the Nocturnal Boundary Layers, M. Karimi , W. Gutierrez, A. Ruiz-Columbie and L. Castillo <i>page 21</i>
17:40	Closing remarks - end