

NREL Wind Turbine Modeling Workshop

Agenda

National Renewable Energy Laboratory
Integrated Biorefinery Research Facility (IBRF), Aspen Rooms A&B
15003 Denver West Parkway
Golden, Colorado 80401 (USA)

March 2, 2012, 9:00 – 17:00

- 8:15 Check in with Security
- 8:30 Workshop Registration

- 9:00 Welcome and Introductions

- 9:30 Presentation 1: CAE Tool Overview
- 10:00 Presentation 2: Overview of the FAST Servo-Elastic Module

- 11:00 Break

- 11:15 Demonstration 1: Onshore, Steady Wind – 8 m/s, No Control
- 11:45 Demonstration 2: Onshore, Steady Wind – 8 m/s

- 12:00 Presentation 3: Overview of the AeroDyn Aerodynamics Module

- 12:30 Lunch

- 13:30 Demonstration 3: Onshore, Steady Wind – 18 m/s
- 13:45 Demonstration 4: Onshore, Turbulent Wind – 18 m/s

- 14:00 Presentation 4: Overview of the HydroDyn Hydrodynamics Module
- 14:30 Demonstration 5: Offshore, Steady Wind – 8 m/s, Periodic Waves – 2 m, 8 s
- 14:45 Demonstration 6: Offshore, Turbulent Wind – 18 m/s, Irregular Waves – 6 m, 10 s
- 15:00 Demonstration 7: Offshore, Pitch Free Decay – No Aerodynamics, Still Water

- 15:15 Break

- 15:30 Presentation 5: Linearization of FAST with AeroDyn & HydroDyn
- 16:00 Demonstration 8: Linearization, Offshore, Parked

- 16:30 Presentation 6: Summary of Ancillary Tools & Pre- & Post-Processors

- 17:00 Adjourn