**NREL/DOE Workshop on the New Modularization Framework for the FAST Wind Turbine CAE Tool**

Dear Wind Turbine Modeling Enthusiast,

The National Renewable Energy Laboratory (NREL) in conjunction with the U.S. Department of Energy (DOE) Wind and Water Power Program will be hosting a workshop on the new modularization framework for the FAST wind turbine computer-aided engineering (CAE) tool. This workshop is specifically targeted at participants of the projects funded through DE-FOA-0000415 who are developing new offshore-related features for FAST, but other users of FAST who contribute (or are planning to contribute) to its development are encouraged to attend. This half-day workshop is free and will be held in conjunction with the *AWEA OFFSHORE WINDPOWER Conference & Exhibition* with the following venue and date:

October 8, 2012[*]
13:00 – 17:00 EDT

Virginia Beach Convention Center, Room # 2A
1000 19th Street
Virginia Beach, VA 23451
United States of America

Through U.S. DOE support, NREL has recently put considerable effort into improving the overall modularity of its FAST wind turbine aero-hydro-servo-elastic tool to (1) improve the ability to read, implement, and maintain source code; (2) increase module sharing and shared code development across the wind community; (3) improve numerical performance and robustness; and (4) enhance flexibility and expandability to enable further developments of functionality without the need to recode established modules. The features of the new FAST modularization framework, as well as the concepts and mathematical background needed to understand and apply it correctly, are being published in Reference [1]. A handbook explaining the code development requirements and best practices for the FAST modularization framework—including a source-code template, data structures, and interface procedures—are being published in Reference [2]. The workshop will be used to summarize this information, garner feedback, and to discuss specific FAST development projects.

The workshop agenda and registration form are attached. Registration will be limited to approximately 50 people, and preference will first be given to DE-FOA-0000415 project participants. We will open up a net-meeting for those who cannot attend in person.[†] Those interested in attending (either in person or by net-meeting) should submit their registration form to Arielle Wolfe at arielle.wolfe@nrel.gov by September 21. We will e-mail draft versions of References [1] and [2] to those who register so that they may be reviewed before the workshop.[‡]

Please forward this invitation to those who you think would be interested.

Best regards,

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[*]This date is the Monday before the first day of the *AWEA OFFSHORE WINDPOWER Conference & Exhibition*; workshop attendees are not required to attend the conference.
[†]Net-meeting login information will be distributed to registrants before the workshop.
[‡]Those who cannot attend but are interested may also request to receive draft versions of References [1] and [2].

References:

[1] Jonkman, J. M. "The New Modularization Framework for the FAST Wind Turbine CAE Tool." *51st AIAA Aerospace Sciences Meeting including the New Horizons Forum and Aerospace Exposition, 7–10 January 2013, Grapevine (Dallas/Ft. Worth Region), TX* [online proceedings]. URL: XXX. AIAA-2013-XXXX. Reston, VA: American Institute of Aeronautics and Astronautics, January 2013; NREL/CP-XXX-XXXXX. Golden, CO: National Renewable Energy Laboratory (to be published).

[2] Jonkman, B. J.; Michalakes, J.; Jonkman, J. M.; Buhl Jr., M. L.; Platt, A.; and Sprague, M. A. *FAST NWTC Programmer's Handbook: A Guide for Software Development within the FAST Computer-Aided Engineering Tool*. NREL/TP-XXX-XXXXX. Golden, CO: National Renewable Energy Laboratory (to be published).