Damage and failure analysis of wind turbine composite blades
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Due to their lightweight, composites are widely used to manufacture wind turbine blades. However, accurately predicting progressive failure in composite materials under multiaxial and fatigue conditions has been a difficult task. In this project, the student will improve so called synergistic damage mechanics methodology, implement in commercial finite element codes, and apply to the case of wind turbine structures. The module developed from the project will be highly valuable in design of safe and long-serving wind turbines.