Chair for Wind Power Drives at RWTH Aachen University conducts many research activities on the subject of wind turbine drive trains. In recent years drive trains of wind turbines were continuously optimized in many research projects.

Though some failures in WT gear boxes still are not properly understood. These failures lead to downtime, which cause high costs and loss of income. To avoid those, we want to understand the mechanisms behind the failures and their causes. For a better understanding we want to look closer into the development of these failures and the belonging trigger.

**Bachelor / Master thesis**
Simulation of a Selected Trigger of Failures of WT-Gear Box Components

**Tasks:**
- Literature research and orientation within the topic
  - Orientation within ABAQUS or SIMPACK
  - Orientation within mechanisms of failures at the considered gear box component
- Detailed simulative description of the considered component
- Perform a sensitivity analysis to understand the generation of the trigger of failure

**Requirements:**
- Motivated to independent work
- A basic knowledge of mechanics
- Interested in simulation sciences

**We offer:**
- Immediate start or as agreed
- Nice working atmosphere
- Flexible working hours

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