

## Research Projects Prof. Dr. Christian Weindl

- Description and calculation of three-phase systems with power electronics components in the state space
- Converter controlled interphase controller for the optimization of the stationary and dynamic operation of electrical power grids
- Development, implementation and optimization of a simulation system for non-linear systems of differential equations in the state space
- Theoretical and experimental study of the protective circuit of high voltage valves for FACTS plants
- Smart Grid - economically and technically optimized integration of renewable energies
- Determination of the rest life-time of PILC cables based on PD and  $\tan(\delta)$  diagnostics
- Evaluation of the service life-time of energy supply systems, equipment and components, taking into account modern measuring and diagnostic procedures
- Spatially resolved evaluation of dielectric properties of power cables
- Development of a measurement system for the dielectric diagnosis of 20kV medium voltage cables and further methods for state assessment
- Condition diagnosis in medium voltage cables in real time