

Topology optimization: basic concepts, implementation, and applications
by **Martin Bendsøe**

The course will survey implementation issues of topology design.

Topics include:

- Design parametrization (interpolation schemes)
- Sensitivity analysis (direct and adjoint methods)
- Algorithms (convex approximation schemes and other methods)
- Computational issues (checkerboards, filters)
- Applications in structural and multi-physics problems (industrial examples, MEMS-MicroElectroMechanicalSystems, wave-propagation problems)