Summary
I will introduce integral equation formulations for the Laplace, the wave equations and the electromagnetic scattering problem. The wellposedness and the discretization of these problems are discussed.

Content
- representation formulae for exterior problems for Laplace and wave equations
- integral equations formulation and wellposedness
- discretization via Galerkin techniques
- the issue of integration
- Calderon identity and Calderon preconditioners
- Extension to electromagnetic wave propagation.
- Compression algorithms

Some of the courses will be organized as reading courses.

Note
Invited lecturer: Stefan SAUTER