

PDE-Constrained Optimization

Between 2000 and 2002 Prof. Mittelmann published half a dozen papers on the numerical solution of control problems for elliptic and parabolic partial differential equations. The problems had, in particular, both control and state constraints and they were solved by a simultaneous discretization of states and controls leading to a large nonlinear optimization problem. These papers seem to have influenced a number of other researchers to also investigate these problems and solution methods.