Minisymposium 20 - Nonlinear and Stochastic Optimization

On optimal control problems with mixed control-state constraints

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Optimal control problems with mixed control-state constraints exhibit a lot of the positive properties of control constrained problems: Lagrange multiplier are measurable and bounded, optimal solutions are Lipschitz continuous for distributed elliptic control problems. Moreover, such problems can approximate optimal control problems with pure state constraints. If control constraints are given in addition, then the approximation error can be estimated. Moreover, we will show new results concerning the discretization error for this class of problems.