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## SOME REMARKS ON STATE CONSTRAINTS AND MIXED CONSTRAINTS \*

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Dedicated to Professor Mihail Megan on the occasion of his 70th anniversary

## Abstract

We review some results on optimal control problems with both state and control constraints, or general mixed constraints, including certain recent developments. In the setting of state constrained control problems, we consider an approximation technique involving variational inequalities. The constraints may be automatically satisfied in this procedure. For control problems with mixed constraints, a relaxation of classical interiority assumptions is presented together with a recent approach based on implicit parametrization results and yielding global type algorithms.

MSC: 49K20, 49M30, 26B10, 65K99.

**keywords:** variational inequalities, interiority assumptions, implicit parametrization, global optimization methods.

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