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1. Introduction 2. Standing hypotheses; 3. The chattering parameters model; 4. The Prohorov metric; 5. Sensitivity for relaxed controls; 6. A matching result; 7. Sensitivity for chattering parameters; 8. Remarks and examples; References; Systems with Continuous Time and Discrete Time Components A. Bacciotti; 1. Introduction; 2. Description of the model; 3. Oscillatory systems: an example; 4. Stability notions; 5. A sufficient condition for stability; 6. Sufficient conditions for asymptotic stability; References; A Review on Stability of Switched Systems for Arbitrary Switchings U. Boscin
 1. Introduction 2. General properties of multilinear systems; 3. Common Lyapunov functions; 4. Two-dimensional bilinear systems; 4.1. The diagonalisable case; 4.1.1. Normal forms in the diagonalizable case; 4.1.2. Stability conditions in the diagonalizable case; 4.2. The nondiagonalizable case; 4.2.1. Normal forms in the nondiagonalizable case; 4.2.2. Stability conditions in the nondiagonalizable case; 5. An open problem; Acknowledgments; References; Regularity Properties of Attainable Sets under State Constraints P. Cannarsa, M. Castelpietra and P. Cardaliaguet; 1. Introduction
 2. Maximum principle under state constraints 3. Perimeter estimates for the attainable set; References; A Generalized Hopf-Lax Formula: Analytical and Approximations Aspects I. Capuzzo Dolcetta; 1. Introduction; 2. A generalized eikonal equation; 3. The generalized Hopf-Lax formula; 4. The Hopf-Lax formula for the Heisenberg Hamiltonian; 4.1. A singular perturbation problem on the Heisenberg group; 4.2. Convergence rate of finite differences approximation; References; Regularity of Solutions to One-Dimensional and Multi-Dimensional Problems in the Calculus of Variations F.H. Clarke
 1. Introduction

Sommario/riassunto

The aim of this volume is to provide a synthetic account of past research, to give an up-to-date guide to current intertwined developments of control theory and nonsmooth analysis, and also to point to future research directions.
