1. Record Nr. UNINA9910299786903321 Autore Zaslavski Alexander J Titolo Turnpike Theory of Continuous-Time Linear Optimal Control Problems // by Alexander J. Zaslavski Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-19141-1 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (300 p.) Collana Springer Optimization and Its Applications, , 1931-6828; ; 104 Disciplina 519.3 Soggetti Calculus of variations Operations research Management science Game theory Calculus of Variations and Optimal Control; Optimization Operations Research, Management Science Game Theory, Economics, Social and Behav. Sciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Preface -- 1. Introduction -- 2. Control systems with periodic convex integrands -- 3. Control systems with non convex integrands -- 4. Stability properties -- 5. Linear control systems with discounting -- 6. Dynamic zero-sum games with linear constraints -- 7. Genericity results -- 8. Variational problems with extended-value integrands -- 9. Dynamic games with extended-valued integrands -- References --Index. Sommario/riassunto Individual turnpike results are of great interest due to their numerous applications in engineering and in economic theory; in this book the study is focused on new results of turnpike phenomenon in linear optimal control problems. The book is intended for engineers as well as for mathematicians interested in the calculus of variations, optimal control, and in applied functional analysis. Two large classes of problems are studied in more depth. The first class studied in Chapter 2 consists of linear control problems with periodic nonsmooth convex

integrands. Chapters 3-5 consist of linear control problems with

autonomous nonconvex and nonsmooth integrands. Chapter 6 discusses a turnpike property for dynamic zero-sum games with linear constraints. Chapter 7 examines genericity results. In Chapter 8, the description of structure of variational problems with extended-valued integrands is obtained. Chapter 9 ends the exposition with a study of turnpike phenomenon for dynamic games with extended value integrands.