Record Nr. UNINA9910784002203321 Autore Jacob Niels Titolo Markov processes and applications [[electronic resource] /] / N. Jacob London, : Imperial College Press, 2005 Pubbl/distr/stampa **ISBN** 1-281-86691-1 9786611866914 1-86094-715-8 Descrizione fisica 1 online resource (504 p.) Collana Pseudo differential operators & Markov processes:: 3 Disciplina 515.2433 519.233 Soggetti Markov processes Pseudodifferential operators Potential theory (Mathematics) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Contents: Preface: Notation: Introduction: Pseudo-Differential Operators and Markov Processes; Part III Markov Processes and Applications; Appendix A Parametrix Construction for Fundamental Solutions of Evolution Equations: Appendix B A Parameter Dependent Extension of Hoh's Calculus; Appendix C On Roth's Method for Constructing Feller Semigroups; Appendix D More Continuous Negative Definite Functions 1: Appendix E More (Complete) Bernstein Functions1; Bibliography; Author Index; Subject Index Sommario/riassunto This volume concentrates on how to construct a Markov process by starting with a suitable pseudo-differential operator. Feller processes, Hunt processes associated with Lp-sub-Markovian semigroups and processes constructed by using the Martingale problem are at the center of the considerations. The potential theory of these processes is further developed and applications are discussed. Due to the nonlocality of the generators, the processes are jump processes and their relations to Levy processes are investigated. Special emphasis is given

to the symbol of a process, a notion which generalize