

1. Record Nr.	UNINA9910784045303321
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Titolo	Stochastic systems in merging phase space [[electronic resource] /] / Vladimir S. Koroliuk, Nikolas Limnios
Pubbl/distr/stampa	Singapore ; ; Hackensack, NJ, : World Scientific, c2005
ISBN	1-281-89911-9 9786611899110 981-270-312-8
Descrizione fisica	1 online resource (348 p.)
Altri autori (Persone)	LimniosN (Nikolaos)
Disciplina	519.2
Soggetti	Stochastic processes Mathematical optimization
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 (p. 315-323) and index.
Nota di contenuto	Preface; Contents; 1. Markov and Semi-Markov Processes; 2. Stochastic Systems with Switching; 3. Stochastic Systems in the Series Scheme; 4. Stochastic Systems with Split and Merging; 5. Phase Merging Principles; 6. Weak Convergence; 7. Poisson Approximation; 8. Applications I; 9. Applications II; Problems to Solve; Appendix A Weak Convergence of Probability Measures; Appendix B Some Limit Theorems for Stochastic Processes; Appendix C Some Auxiliary Results; Bibliography; Notation; Index
Sommario/riassunto	This book provides recent results on the stochastic approximation of systems by weak convergence techniques. General and particular schemes of proofs for average, diffusion, and Poisson approximations of stochastic systems are presented, allowing one to simplify complex systems and obtain numerically tractable models. The systems discussed in the book include stochastic additive functionals, dynamical systems, stochastic integral functionals, increment processes and impulsive processes. All these systems are switched by Markov and semi-Markov processes whose phase space is considered in asympt