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Nota di contenuto	Contents ; Preface ; Coherent Quantum Control of A-Atoms through the Stochastic Limit ; 1 Introduction ; 2 An atom in a laser field ; 3 The stochastic limit ; 4 The quantum master equation ; 5 Stationary states for a two-level atom ; 6 Stationary states for a three-level atom 7 Three-level lambda-atom 8 Two-level 3-times degenerate atom ; 9 Conclusions ; References ; Recent Advances in Quantum White Noise Calculus ; 1 Emergence of white noise equations from classical quantum mechanics ; 2 Quantum white noise unitary evolutions 3 Higher powers of white noise 4 Applications to quantum stochastic control ; References ; Control of Quantum States by Decoherence ; 1 Introduction ; 2 A master equation driving to a pre-assigned state ; 3 A microscopic

model ; 4 The Master equation ; 5  
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 model ; References ;  
 Logical Operations Realized on the Ising Chain of N Qubits  
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 4 A Pair of Pure and General States for Two Subsystems  
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 Optimal Feedback Control of a Gaussian Quantum Free Particle  
 ; 1 Introduction ; 2 The Model ; 3 Quantum  
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 On Existence of Quantum Zeno Dynamics

Sommario/riassunto

The main purpose of this volume is to emphasize the multidisciplinary aspects of this very active new line of research in which concrete technological and industrial realizations require the combined efforts of experimental and theoretical physicists, mathematicians and engineers.   
*Contents:*

- Coherent Quantum Control of -Atoms through the Stochastic Limit (L Accardi et al.)
- Recent Advances in Quantum White Noise Calculus (L Accardi & A Boukas)
- Joint Extension of States of Fermion Subsystems (H Araki)
- Fidelity of Quantum Teleportati