

1. Record Nr.	UNISA996466539703316
Titolo	Quantum probability and applications . III : proceedings of a conference held in Oberwolfach, FRG, January 25-31, 1987 // L. Accardi, W. von Waldenfels (editors)
Pubbl/distr/stampa	Berlin : , : Springer-Verlag, , 1988
ISBN	3-540-38846-X
Edizione	[1st ed. 1988.]
Descrizione fisica	1 online resource (VIII, 376 p.)
Collana	Lecture notes in mathematics ; ; 1303
Altri autori (Persone)	AccardiL <1947-> (Luigi) WaldenfelsW. von <1932-> (Wilhelm)
Disciplina	519.2
Soggetti	Probabilities Stochastic processes Quantum theory Markov processes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	A note on Meyer's note -- Stochastic integration -- Quantum stochastic parallel transport on non-commutative vector bundles -- Input and output channels in quantum systems and quantum stochastic differential equations -- Some noncommutative Radon-Nikodym Theorems for von Neumann algebras -- Multidimensional quantum diffusions -- An application of de finetti's theorem -- The quantum Langevin equation from the independent-oscillator model -- Quantum poisson processes: Physical motivations and applications -- A noncommutative generalization of conditionally positive definite functions -- Contraction semigroups in L2 over a von neumann algebra -- Survey on a theory of non-commutative stationary markov processes -- Dynamical entropy for quantum systems -- An integral kernel approach to noise -- A note on shifts and cocycles -- Local measures in fock space stochastic calculus and a generalized ito-tanaka formula -- Representation of a class of quantum martingales II -- Conditional expectation in quantum probability -- Mutual quadratic variation and ito's table in quantum stochastic calculus -- On mixing properties of automorphisms of von neumann algebras related to measure space

transformations -- First exit time: A theory of stopping times in quantum processes -- A central limit theorem on the free lie group -- Entropy, observability and the generalised second law of thermodynamics -- Remarks on asymptotic properties of groups of the bogoliubov transformations of car  $c^*$ -algebras -- Linear and non-linear stochastic processes -- Detailed balance and critical slowing down -- Quantum martingales and stochastic integrals.

---

Sommario/riassunto

These proceedings of the first Quantum Probability meeting held in Oberwolfach is the fourth in a series begun with the 1982 meeting of Mondragone and continued in Heidelberg ('84) and in Leuven ('85). The main topics discussed were: quantum stochastic calculus, mathematical models of quantum noise and their applications to quantum optics, the quantum Feynman-Kac formula, quantum probability and models of quantum statistical mechanics, the notion of conditioning in quantum probability and related problems (dilations, quantum Markov processes), quantum central limit theorems. With the exception of Kümmerer's review article on Quantum Markov Processes, all contributions are original research papers.

---