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Soggetti	Probabilities Applied mathematics Engineering mathematics Probability Theory and Stochastic Processes Applications of Mathematics Conference papers and proceedings.
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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Preface -- Along paths inspired by Ludwig Streit: Stochastic equations for quantum fields and related systems -- Detecting hierarchical communities in net-works: a new approach -- Transition Probabilities for Processes with Memory on Topological Non-trivial Spaces -- Generalized Scaling Operators in White Noise Analysis and Applications to Hamiltonian Path Integrals with Quadratic Action -- Computer Simulations of Self-Repelling Fractional Brownian Motion -- Principal Solutions Revisited -- Laplace operators in gamma analysis -- 38 years with Professor Ludwig Streit -- Quasi-analyticity and determinacy of the full moment problem from finite to infinite dimensions -- Elements for the Retrieval of the Solar Spectrum on the Surface of Mars from an Array of Photodiodes -- Stochastic processes on ends of tree and Dirichlet forms -- Completing Canonical Quantization, and Its Role in Nontrivial Scalar Field Quantization -- Stochastic solutions of nonlinear PDE's and an extension of superprocesses -- Maximum likelihood drift estimation for the mixing of two fractional Brownian motions --

Existence of density for solutions of mixed stochastic equations.

Sommario/riassunto

This volume presents a collection of papers covering applications from a wide range of systems with infinitely many degrees of freedom studied using techniques from stochastic and infinite dimensional analysis, e.g. Feynman path integrals, the statistical mechanics of polymer chains, complex networks, and quantum field theory. Systems of infinitely many degrees of freedom create their particular mathematical challenges which have been addressed by different mathematical theories, namely in the theories of stochastic processes, Malliavin calculus, and especially white noise analysis. These proceedings are inspired by a conference held on the occasion of Prof. Ludwig Streit's 75th birthday and celebrate his pioneering and ongoing work in these fields.
