

1. Record Nr.	UNINA9910784964503321
Titolo	Stochastic analysis in mathematical physics [[electronic resource]] : proceedings of a satellite conference of ICM 2006, Lisbon, Portugal, 4-8 September 2006 / / editors, Gerard Ben Arous ... [et al.]
Pubbl/distr/stampa	Hackensack, NJ, : World Scientific, c2008
ISBN	1-281-93397-X 9786611933975 981-279-155-8
Descrizione fisica	1 online resource (158 p.)
Altri autori (Persone)	ArousGerard Ben
Disciplina	530.15/923
Soggetti	Stochastic processes Mathematical physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	" ... satellite of the International Congress of Mathematicians (ICM2006, Madrid), took place in Lisbon and was organized by the Group of Mathematical Physics of the University of Lisbon (GFMUL)"--P. v.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Stochastic parallel transport on the d-dimensional torus / Ana Bela Cruzeiro and Paul Malliavin -- Riemannian geometry of Diff(S p1 s)/S p1 s revisited / Maria Gordina -- Ergodic theory of SDE's with degenerate noise / Antti Kupiainen -- Dynkin's isomorphism without symmetry / Yves Le Jan -- Large deviations for the two-dimensional Yang-Mills measure / Thierry Levy -- Laplace operator in networks of thin fibers: spectrum near the threshold / S. Molchanov and B. Vainberg -- Adiabatic limits and quantum decoherence / Rolando Rebolledo and Dominique Spehner -- Gauge theory in two dimensions: topological, geometric and probabilistic aspects / Ambar N. Sengupta -- Near extinction of solution caused by strong absorption on a fine-grained set / V. V. Yurinsky and A. L. Piatnitski.
Sommario/riassunto	"The ideas and principles of stochastic analysis have managed to penetrate into various fields of pure and applied mathematics in the last 15 years; it is particularly true for mathematical physics. This volume provides a wide range of applications of stochastic analysis in fields as varied as statistical mechanics, hydrodynamics, Yang–Mills theory and spin-glass theory. The proper concept of stochastic

dynamics relevant to each type of application is described in detail here. Altogether, these approaches illustrate the reasons why their dissemination in other fields is likely to accelerate in the years to come."
