Record Nr. UNINA9910480264103321 Geometry of random motion: proceedings of the AMS-IMS-SIAM Joint **Titolo** Summer Research Conference held July 19-25, 1987 with support from the National Science Foundation and the Army Research Office / / Rick Durrett and Mark A. Pinsky, editors Pubbl/distr/stampa Providence, Rhode Island:,: American Mathematical Society,, [1988] ©1988 **ISBN** 0-8218-7662-7 Descrizione fisica 1 online resource (352 p.) Collana Contemporary mathematics;; volume 73 516.3/62 Disciplina Soggetti Global differential geometry Elliptic operators Stochastic analysis Markov processes Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "The AMS-IMS-SIAM Joint Summer Research Conference in the Mathematical Sciences on Geometry of Random Motion was held at Cornell University, Ithaca"--Title page verso. Nota di bibliografia Includes bibliographies. ""Contents""; ""Preface""; ""Fluctuations of the Wiener sausage for Nota di contenuto surfaces""; ""A review of recent and older results on the absolute continuity of harmonic measure"; ""Constructing stochastic flows: some examples""; ""Spectral and function theory for combinatorial Laplacians""; ""On deciding whether a surface is parabolic or hyperbolic""; ""A solvable stochastic control problem in spheres""; ""Brownian motion and the ends of a manifold""; ""On holomorphic diffusions and plurisubharmonic functions""; ""Leading terms in the asymptotics of the heat equation"" ""Probability theory and differential equations""""Brownian motion and Riemannian geometry""; ""First-order asymptotics of the principal eigenvalue of tubular neighborhoods""; ""1. Introduction""; ""2. Nongeometric expansion in the Ball""; ""3. Cylindrical trace in a hypersurface""; ""4. Case of a tube about a Curve in R3""; ""5. Case of a tube about a hypersurface in Rn""; ""Martingales on manifolds and harmonic maps""; ""Harmonic functions on Riemannian manifolds""; ""Quantitative and geometric applications of the Malliavin calculus""; ""An independence property of Brownian motions"" ""Stochastic parallel translation for Riemannian Brownian motion conditioned to hit a fixed point of a sphere"""Probabilistic interpretation of Hadamard's variational formulas""; ""A counterexample for Brownian motion on manifolds""; ""Using random motion to study quasiregular functions""; ""Skew-product decompositions of Brownian motions""; ""Local stochastic differential geometry""; ""A0. Brownian motion of a manifold""; ""A1. Expansion of the laplacian""; ""A2. Exit time from small balls""; ""A3. Exit place from small balls""; ""A4. Independence of exit time and place""
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