Record Nr. UNISA996466623803316 Autore Neuenschwander Daniel <1963-> Titolo Probabilities on the Heisenberg group: limit theorems and Brownian motion / / Daniel Neuenschwander Pubbl/distr/stampa Berlin, Germany;; New York, New York:,: Springer-Verlag,, [1996] ©1996 **ISBN** 3-540-68590-1 Edizione [1st ed. 1996.] Descrizione fisica 1 online resource (VIII, 148 p.) Collana Lecture Notes in Mathematics, , 0075-8434; ; 1630 Disciplina 519.2 Soggetti Brownian motion processes Limit theorems (Probability theory) Probability measures Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Probability theory on simply connected nilpotent Lie groups --Nota di contenuto Brownian motions on H -- Other limit theorems on H. Sommario/riassunto The Heisenberg group comes from quantum mechanics and is the simplest non-commutative Lie group. While it belongs to the class of simply connected nilpotent Lie groups, it turns out that its special structure yields many results which (up to now) have not carried over to this larger class. This book is a survey of probabilistic results on the Heisenberg group. The emphasis lies on limit theorems and their relation to Brownian motion. Besides classical probability tools, noncommutative Fourier analysis and functional analysis (operator semigroups) comes in. The book is intended for probabilists and analysts interested in Lie groups, but given the many applications of

the Heisenberg group, it will also be useful for theoretical phycisists

specialized in quantum mechanics and for engineers.