Record Nr. UNISALENTO991003263519707536 Autore Mukhamedov, Farrukh Titolo Quantum quadratic operators and processes / Farrukh Mukhamedov, Nasir Ganikhodjaev Cham [Switzerland]: Springer, c2015 Pubbl/distr/stampa **ISBN** 9783319228365 Descrizione fisica xiv, 231 p.; 24 cm Collana Lecture notes in mathematics, 0075-8434; 2133 Classificazione AMS 81-01 AMS 37A50 AMS 47D07 AMS 60J25 LC QA614.8.M85 Ganikhodjaev, Nasirauthor Altri autori (Persone) Disciplina 510 Soggetti Differentiable dynamical systems Functional analysis Stochastic processes Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index Nota di contenuto Introduction; Quadratic stochastic operators; Quadratic processes; Analytic methods in the theory of quadratic stochastic processes; Quantum quadratic operators; Quantum quadratic operators on M2(C) ; Infinite-dimensional quadratic operators ; Quantum quadratic stochastic processes Sommario/riassunto Covering both classical and quantum approaches, this unique and selfcontained book presents the most recent developments in the theory of quadratic stochastic operators and their Markov and related processes. The asymptotic behavior of dynamical systems generated by classical and quantum quadratic operators is investigated and various properties of quantum quadratic operators are studied, providing an insight into the construction of quantum channels. This book is suitable as a textbook for an advanced undergraduate/graduate level course or summer school in quantum dynamical systems. It can also be used as a reference book by researchers looking for interesting problems to

work on, or useful techniques and discussions of particular problems. Since it includes the latest developments in the fields of quadratic

dynamical systems, Markov processes and quantum stochastic processes, researchers at all levels are likely to find the book inspiring and useful