1. Record Nr. UNINA9910767563903321 Autore Schaffler Stefan Titolo Generalized Stochastic Processes: Modelling and Applications of Noise Processes / / by Stefan Schäffler Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Birkhäuser,, 2018 **ISBN** 3-319-78768-3 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (XV, 183 p. 69 illus., 1 illus. in color.) Collana Compact Textbooks in Mathematics, , 2296-4568 Disciplina 519.2 Soggetti **Probabilities** Probability Theory and Stochastic Processes Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Generalized Functions -- Stochastic Processes -- Stochastic Differential Nota di contenuto Equations -- Generalized Random Fields. Sommario/riassunto This textbook shall serve a double purpose: first of all, it is a book about generalized stochastic processes, a very important but highly neglected part of probability theory which plays an outstanding role in noise modelling. Secondly, this textbook is a guide to noise modelling for mathematicians and engineers to foster the interdisciplinary discussion between mathematicians (to provide effective noise models) and engineers (to be familiar with the mathematical background of noise modelling in order to handle noise models in an optimal way). Two appendices on "A Short Course in Probability Theory" and "Spectral Theory of Stochastic Processes" plus a well-chosen set of problems and

solutions round this compact textbook off.