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| Nota di contenuto       | Part I Stochastic Processes: Silvestrov Dmitrii: A Journey in the World of Stochastic Processes -- Silvestrov Dmitrii: Individual Ergodic Theorems for Perturbed Alternating Regenerative Processes -- Krasnitskiy Sergey and Kurchenko Oleksandr: On Baxter Type Theorems for Generalized Random Gaussian Fields -- Bajja Salwa, Es-Sebaiy Khalifa, and Viitasaari Lauri: Limit Theorems for Quadratic Variations of the Lei-Nualart Process -- Mishura Yuliya, Ralchenko Kostiantyn, and Shklyar Sergiy: Parameter Estimation for Gaussian Processes with Application to the Model with two Independent Fractional Brownian Motions -- |

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## Sommario/riassunto

This book highlights the latest advances in stochastic processes, probability theory, mathematical statistics, engineering mathematics and algebraic structures, focusing on mathematical models, structures, concepts, problems and computational methods and algorithms important in modern technology, engineering and natural sciences applications. It comprises selected, high-quality, refereed contributions from various large research communities in modern stochastic processes, algebraic structures and their interplay and applications. The chapters cover both theory and applications, illustrated by numerous figures, schemes, algorithms, tables and research results to help readers understand the material and develop new mathematical methods, concepts and computing applications in the future. Presenting new methods and results, reviews of cutting-edge research, and open problems and directions for future research, the book serves as a source of inspiration for a broad spectrum of researchers and research students in probability theory and mathematical statistics, applied algebraic structures, applied mathematics and other areas of mathematics and applications of mathematics. The book is based on selected contributions presented at the International Conference on “Stochastic Processes and Algebraic Structures – From Theory Towards Applications” (SPAS2017) to mark Professor Dmitrii Silvestrov’s 70th birthday and his 50 years of fruitful service to mathematics, education and international cooperation, which was held at Mälardalen University in Västerås and Stockholm University, Sweden, in October 2017.

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