

1. Record Nr.	UNINA9910782120603321
Titolo	Probability, finance and insurance [[electronic resource]] : proceedings of a workshop at the University of Hong Kong, Hong Kong, 15-17 July 2002 / / editors, Tze Leung Lai, Hailiang Yang, Siu Pang Yung
Pubbl/distr/stampa	Singapore ; ; River Edge, : World Scientific, c2004
ISBN	1-281-89874-0 9786611898748 981-270-271-7
Descrizione fisica	1 online resource (252 p.)
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Disciplina	332.015192
Soggetti	Investments - Mathematics Finance - Mathematical models Insurance - Statistical methods
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface; List of Participants; CONTENTS; Limit theorems for moving averages; 1. Introduction; 2. Strong limit theorems for moving averages; 3. Large deviation approximations for logarithmic window sizes; 4. Window sizes associated with moderate deviation approximations; 5. Maxima and boundary crossing probabilities of asymptotically Gaussian random fields; References; On large deviations for moving average processes; 1. Introduction; 2. Main results; 3. A priori estimation; 4. Proofs of Theorem 2.1 and Theorem 2.2; 5. Proofs of Theorem 2.3 Corollary 2.1 6. Proofs of Propositions 2.1 2.2 and Theorem 2.47. Appendix: proof of Lemma 3.3; References; Recent progress on self-normalized limit theorems; 1. Introduction; 2. Self-normalized saddlepoint approximations; 3. Limit distributions of self-normalized sums; 4. Weak invariance principle for self-normalized partial sum processes; 5. Darling-Erdos theorems for self-normalized sums; 6. Large and moderate deviations for self-normalized empirical processes; 7.

Cramer type large deviations for independent random variables; 8. Exponential inequalities for self-normalized processes; References Limit theorems for independent self-normalized sums1. Introduction; 2. Asymptotic Normality; 3. Uniform Berry-Esseen Bounds; 4. Non-Uniform Berry-Esseen Bounds; 5. Exponential Non-Uniform Berry-Esseen Bounds; 6. Edgeworth Expansions; 7. Moderate Deviations; 8. Large Deviations; 9. Saddlepoint Approximations; 10. LIL for Partial Sums; 11. LIL for Increments of Partial Sums; 12. Summary; References; Phase changes in random recursive structures and algorithms; 1. Phase changes related to the Poisson distribution; 2. Phase changes related to Quicksort; 3. Conclusions; References
Iterated random function system: convergence theorems1. Introduction; 2. Stochastic stability and ergodic theorem; 3. Central limit theorem and quick convergence: Poisson equation approach; References; Asymptotic properties of adaptive designs via strong approximations; 1. Introduction; 2. Play-the-Winner rule and Markov chain adaptive designs; 3. Randomized play-the-Winner rule and generalized Polya urn; 4. Doubly adaptive biased coin designs; 5. The drop-the-loss rule; 6. The minimum asymptotic variance; References; Johnson-Mehl tessellations: asymptotics and inferences; 1. Introduction 2. Asymptotics3. Statistics; References; Rapid simulation of correlated defaults and the valuation of basket default swaps; 1. Introduction; 2. Hazard rate model and calibration; 3. Pricing basket default swaps; 4. Conclusion; Appendix A. Explicit solution of the jump CIR generating function; Appendix B. Copula Functions; References; Optimal consumption and portfolio in a market where the volatility is driven by fractional Brownian motion; 1. Introduction; 2. General Results; 3. Some Particular Utility Functions; 4. Conclusion; References
MLE for change-point in ARMA-GARCH models with a changing drift

Sommario/riassunto

This workshop was the first of its kind in bringing together researchers in probability theory, stochastic processes, insurance and finance from mainland China, Taiwan, Hong Kong, Singapore, Australia and the United States. In particular, as China has joined the WTO, there is a growing demand for expertise in actuarial sciences and quantitative finance. The strong probability research and graduate education programs in many of China's universities can be enriched by their outreach in fields that are of growing importance to the country's expanding economy, and the workshop and its proceedings
