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Disciplina	519
Soggetti	System theory Probabilities Environmental economics Game theory Partial differential equations Calculus of variations Systems Theory, Control Probability Theory and Stochastic Processes Environmental Economics Game Theory, Economics, Social and Behav. Sciences Partial Differential Equations Calculus of Variations and Optimal Control; Optimization
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Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Some recent developments in ambit stochastics -- Functional and Banach space stochastic calculi. Path-dependent Kolmogorov equations associated with the frame of a Brownian motion -- Nonlinear Young integrals via fractional calculus -- A weak limit theorem for numerical approximation of Brownian semi-stationary processes -- Non-elliptic SPDEs and ambit fields: existence of densities -- Dynamic risk measures and path-dependent second order PDEs -- Pricing CoCos with a market trigger -- Quantification of model risk in quadratic

hedging in finance -- Risk-sensitive mean-field type control under partial observation -- Risk aversion in modeling of cap-and-trade mechanism and optimal design of emission markets -- Exponential ergodicity of the jump-diffusion CIR process -- Optimal control of predictive mean-field equations and applications to finance -- Modelling the impact of wind power production on electricity prices by regime-switching Levy semistationary processes -- Pricing options on EU ETS certificates with a time-varying market price of risk model.

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Sommario/riassunto

These Proceedings offer a selection of peer-reviewed research and survey papers by some of the foremost international researchers in the fields of finance, energy, stochastics and risk, who present their latest findings on topical problems. The papers cover the areas of stochastic modeling in energy and financial markets; risk management with environmental factors from a stochastic control perspective; and valuation and hedging of derivatives in markets dominated by renewables, all of which further develop the theory of stochastic analysis and mathematical finance. The papers were presented at the first conference on “Stochastics of Environmental and Financial Economics (SEFE)”, being part of the activity in the SEFE research group of the Centre of Advanced Study (CAS) at the Academy of Sciences in Oslo, Norway during the 2014/2015 academic year.

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