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Nota di contenuto	Control in Hilbert Space and First-Order Mean Field Type Problem (A. Bensoussan) -- Risk-Sensitive Markov Decision Problems under Model Uncertainty: Finite Time Horizon Case (R. Bielecki) -- Optimal Control of Piecewise Deterministic Markov Processes (F. Dufour) -- Pathwise Approximations for the Solution of the Non-Linear Filtering Problem (D. Crisan) -- Discrete-Time Portfolio Optimization under Maximum Drawdown Constraint with Partial Information and Deep Learning Resolution (H. Pham) -- Estimating the Matthew Effects: Switching Pareto Dynamics (J. Elliott) -- Optimal Couplings on Wiener Space and An Extension of Talagrand's Transport Inequality (F¨ollmer) -- Who Are I: Time Inconsistency and Intrapersonal Conflict and Reconciliation (Yu Zhou) -- N-Player and Mean-Field Games in Ito-Diffusion Markets with Competitive or Homophilous Interaction (T. Zariphopoulou) -- A Variational Characterization of Langevin-Smoluchowski Diffusions (H. Xing) -- Incomplete Stochastic Equilibria with Exponential Utilities Close to Pareto Optimality (B. Tschiderer) -- Finite Markov Chains

Coupled to General Markov Processes and An Application to Metastability I (J. Swanson) -- Finite Markov Chains Coupled to General Markov Processes and An Application to Metastability II (J. Swanson) -- Maximally Distributed Random Fields under Sublinear Expectation (S. Peng) -- Pairs Trading under Geometric Brownian Motion Models (Q. Zhang) -- Equilibrium Model of Limit Order Books: A Mean-Field Game View (J. Ma) -- Bounded Regret for Finitely Parameterized Multi-Armed Bandits (P. Varaiya) -- Developing the Path Signature Methodology and Its Application to Landmark-Based Human Action Recognition (T. Lyons).

Sommario/riassunto

This volume is a collection of research works to honor the late Professor Mark H.A. Davis, whose pioneering work in the areas of Stochastic Processes, Filtering, and Stochastic Optimization spans more than five decades. Invited authors include his dissertation advisor, past collaborators, colleagues, mentees, and graduate students of Professor Davis, as well as scholars who have worked in the above areas. Their contributions may expand upon topics in piecewise deterministic processes, pathwise stochastic calculus, martingale methods in stochastic optimization, filtering, mean-field games, time-inconsistency, as well as impulse, singular, risk-sensitive and robust stochastic control. .