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Sommario/riassunto	This volume—dedicated to Michael K. Sain on the occasion of his seventieth birthday—is a collection of chapters covering recent advances in stochastic optimal control theory and algebraic systems theory. Written by experts in their respective fields, the chapters are thematically organized into four parts: * Part I focuses on statistical control theory, where the cost function is viewed as a random variable and performance is shaped through cost cumulants. In this respect, statistical control generalizes linear-quadratic-Gaussian and H-infinity control. * Part II addresses algebraic systems theory, reviewing the use

of algebraic systems over semirings, modules of zeros for linear multivariable systems, and zeros in linear time-delay systems. * Part III discusses advances in dynamical systems characteristics. The chapters focus on the stability of a discontinuous dynamical system, approximate decentralized fixed modes, direct optimal adaptive control, and stability of nonlinear systems with limited information. * Part IV covers engineering education and includes a unique chapter on theology and engineering, one of Sain's latest research interests. The book will be a useful reference for researchers and graduate students in systems and control, algebraic systems theory, and applied mathematics. Requiring only knowledge of undergraduate-level control and systems theory, the work may be used as a supplementary textbook in a graduate course on optimal control or algebraic systems theory.