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 ""1 Introduction"" ""2 Problem Statement and Approach to the Solution""; ""2.1 Estimator for Linear System""; ""2.2 Estimators for Nonlinear System""; ""3 The Constant Acceleration Target Maneuver Model""; ""4 Kinematic Equations of Spiraling Target""; ""4.1 The Kinematics as a Function of Velocity""; ""5 The Variance and Spectrum of the Glint Noise""; ""6 Incorporation of the Kinematic Constraint""; ""6.1 Velocity Based Snap Kinematic Equation""; ""7 Planar Spiraling Target Maneuver Trajectory Model""; ""8 The SDDRE Based Discrete Estimator""; ""9 Simulation Results""; ""10 Conclusions""
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 ""4 Generalized Reference Basis"" ""5 Generalized Reference Basis with Connectivity Constraints""; ""5.1 Connectivity""; ""5.2 Implicit Parameterization by Weighting Matrix Adjustment""; ""5.3 A Posteriori Connectivity Assignment""; ""6 Direct Method a€? Manifold Distance Minimization""; ""7 Conclusion""; ""References""; ""Stochastic Estimation and Control for Linear Systems with Cauchy Noise""; ""1 Introduction""; ""2 Scalar Estimation Problem Formulation""; ""3 One Step""; ""Measurement Update""; ""Time Update""; ""Conditional pdf Factorization""
 ""4 The General Form of the Cauchy Estimator""

Sommario/riassunto

This book presents selected papers of the Itzhack Y. Bar-Itzhack Memorial Symposium on Estimation, Navigation, and Spacecraft Control. Itzhack Y. Bar-Itzhack, professor Emeritus of Aerospace Engineering at the Technion – Israel Institute of Technology, was a prominent and world-renowned member of the applied estimation, navigation, and spacecraft attitude determination communities. He touched the lives of many. He had a love for life, an incredible sense of humor, and wisdom that he shared freely with everyone he met. To honor Professor Bar-Itzhack's memory, as well as his numerous seminal professional achievements, an international symposium was held in Haifa, Israel, on October 14–17, 2012, under the auspices of the Faculty of Aerospace Engineering at the Technion and the Israeli Association for Automatic Control. The book contains 27 selected, revised, and edited contributed chapters written by eminent international experts. The book is organized in three parts: (1) Estimation, (2) Navigation and (3) Spacecraft Guidance, Navigation and Control. The volume was prepared as a reference for research scientists and practicing engineers from academy and industry in the fields of estimation, navigation, and spacecraft GN&C.
