1. Record Nr. UNINA9910146088003321 Autore Brookner Eli Titolo Tracking and Kalman filtering made easy [Place of publication not identified], : Wiley, 1998 Pubbl/distr/stampa **ISBN** 1-280-55638-2 9786610556380 0-470-30528-2 0-471-22419-7 Edizione [Reissue] Descrizione fisica 1 online resource (XXIII, 463 p.) 621.3848 Disciplina Soggetti Electric filters - Mathematics Tracking radar - Mathematics Kalman filtering **Electrical & Computer Engineering Engineering & Applied Sciences Electrical Engineering** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto G-h and g-h-k filters -- Kalman filter -- Practical issues for radar tracking -- Least-squares and minimum-variance estimates for linear time-invariant systems -- Fixed-memory polynomial filter --Expanding-memory (growing-memory) polynomial filters -- Fadingmemory (discounted least-squares) filter -- General form for linear time-invariant system -- General recursive minimum-variance growing-memory filter (Bayes and Kalman filters without target process noise) -- Voltage least-squares algorithms revisited -- Givens orthonormal transformation -- Householder orthonormal transformation -- Gram-Schmidt orthonormal transformation -- More on voltage-processing techniques -- Linear time-variant system --Nonlinear observation scheme and dynamic model (extended Kalman

nonlinear systems -- Kalman filter revisited.

Sommario/riassunto

This book is about radar tracking and the use of filters, particularly

filter) -- Bayes algorithm with iterative differential correction for

Kalman Filters. Tracking of moving targets, such as satellites, is complicated by the introduction of errors into the measurements resulting from noise and non-uniform vehicle motion. Such errors are smoothed out by filters. The book covers these filters from very simple, physical and geometric approaches.