Record Nr. UNINA9910254300703321 Autore Nagy Ivan Titolo Algorithms and programs of dynamic mixture estimation: unified approach to different types of components // by Ivan Nagy, Evgenia Suzdaleva Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2017 3-319-64671-0 **ISBN** Edizione [1st ed. 2017.] 1 online resource (113 pages): illustrations, tables Descrizione fisica Collana SpringerBriefs in Statistics, , 2191-544X Disciplina 519.544 Soggetti **Probabilities Statistics** System theory Computer simulation **Algorithms** Probability Theory and Stochastic Processes Statistical Theory and Methods Systems Theory, Control Simulation and Modeling Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Introduction -- Basic Models -- Statistical Analysis of Dynamic Nota di contenuto Mixtures -- Dynamic Mixture Estimation -- Program Codes --Experiments -- Appendices. This book provides a general theoretical background for constructing Sommario/riassunto the recursive Bayesian estimation algorithms for mixture models. It

This book provides a general theoretical background for constructing the recursive Bayesian estimation algorithms for mixture models. It collects the recursive algorithms for estimating dynamic mixtures of various distributions and brings them in the unified form, providing a scheme for constructing the estimation algorithm for a mixture of components modeled by distributions with reproducible statistics. It offers the recursive estimation of dynamic mixtures, which are free of iterative processes and close to analytical solutions as much as possible. In addition, these methods can be used online and simultaneously perform learning, which improves their efficiency

during estimation. The book includes detailed program codes for solving the presented theoretical tasks. Codes are implemented in the open source platform for engineering computations. The program codes given serve to illustrate the theory and demonstrate the work of the included algorithms.