1. Record Nr. UNINA9910299647803321 Autore Hassani Hossein Titolo Singular Spectrum Analysis: Using R / / by Hossein Hassani, Rahim Mahmoudvand London:,: Palgrave Macmillan UK:,: Imprint: Palgrave Pivot,, 2018 Pubbl/distr/stampa **ISBN** 1-137-40951-7 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (158 pages) Collana Palgrave Advanced Texts in Econometrics, , 2662-639X Disciplina 005.3 Soggetti **Economics** Management science R (Computer program language) Economics, general Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Preface -- 1. Univariate Singular Spectrum Analysis -- 2. Multivariate Singular Spectrum Analysis -- 3. Applications of Singular Spectrum Analysis -- 4. More on Filtering and Forecasting by SSA -- A. A Short Introduction to R -- B. Theoretical explanations. . Sommario/riassunto This book provides a broad introduction to computational aspects of Singular Spectrum Analysis (SSA) which is a non-parametric technique and requires no prior assumptions such as stationarity, normality or linearity of the series. This book is unique as it not only details the theoretical aspects underlying SSA, but also provides a comprehensive guide enabling the user to apply the theory in practice using the R software. Further, it provides the user with step- by- step coding and guidance for the practical application of the SSA technique to analyze their time series databases using R. The first two chapters present basic notions of univariate and multivariate SSA and their implementations in R environment. The next chapters discuss the applications of SSA to change point detection, missing-data imputation, smoothing and filtering. This book is appropriate for researchers, upper level students (masters level and beyond) and

practitioners wishing to revive their knowledge of times series analysis

or to quickly learn about the main mechanisms of SSA...