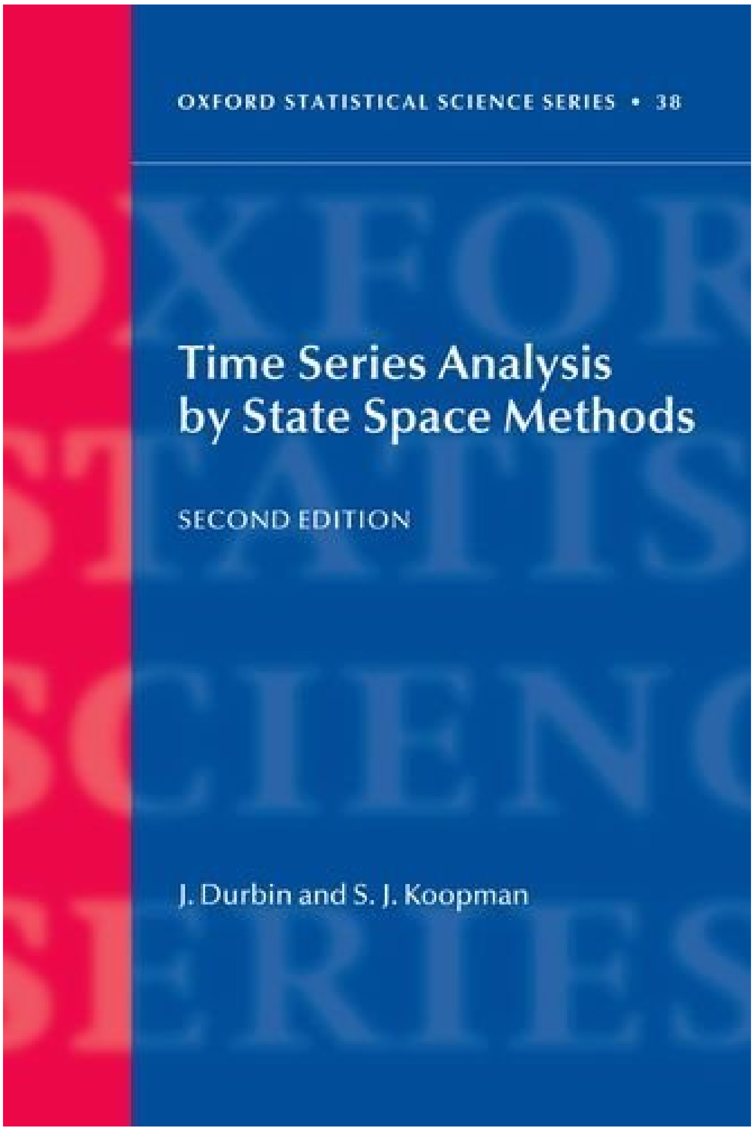
Time Series Analysis by State Space Methods (Oxford Statistical Science Series)

James Durbin, Siem Jan Koopman



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James Durbin, Siem Jan Koopman : Time Series Analysis by State Space Methods (Oxford Statistical Science Series) before purchasing it in order to gage whether or not it would be worth my time, and all praised Time Series Analysis by State Space Methods (Oxford Statistical Science Series):

8 of 8 people found the following review helpful. A Comprehensive and Detailed Mathematical TreatmentBy Kevin S. GrayIf you're on the hunt for a comprehensive and detailed mathematical treatment of State Space modeling, this book may be what you're looking for. It's a "heavy" textbook, not a "how-to" cookbook, but is well-organized and well-

written. The first author was James Durbin, the renowned statistician who passed away in 2012 at the age of 88. His frequent collaborator, Siem Jan Koopman, is widely published on time series analysis and econometrics topics.0 of 0 people found the following review helpful. Great bookBy KrixGood book to learn how to do filtering. clear and concise. I havent finished the book but I believe they could add more on high dimensional problems.0 of 0 people found the following review helpful. Five StarsBy Ziyi MaiExcellent treatment for the frontier research in time series with emphasis on MCMC with state-space approach.

This new edition updates Durbin Koopman's important text on the state space approach to time series analysis. The distinguishing feature of state space time series models is that observations are regarded as made up of distinct components such as trend, seasonal, regression elements and disturbance terms, each of which is modelled separately. The techniques that emerge from this approach are very flexible and are capable of handling a much wider range ofproblems than the main analytical system currently in use for time series analysis, the Box-Jenkins ARIMA system. Additions to this second edition include the filtering of nonlinear and non-Gaussian series.Part I of the book obtains the mean and variance of the state, of a variable intended to measure the effect of an interaction and of regression coefficients, in terms of the observations.Part II extends the treatment to nonlinear and non-normal models. For these, analytical solutions are not available so methods are based on simulation.

from previous edition: "...provides an up-to-date exposition and comprehensive treatment of state space models in time series analysis...This book will be helpful to graduate students and applied statisticians working in the area of econometric modelling as well as researchers in theareas of engineering, medicine and biology where state space models are used." --Journal of the Royal Statistical SocietyAbout the AuthorJames Durbin was Professor of Statistics at the London School of Economics, President of the Royal Statistical Society and President of the International Statistical Institute. He was awarded the society's bronze, silver and gold medals for his contribution to statistics. He is a fellow of the British Academy.Siem Jan Koopman has been Professor of Econometrics at the Free University in Amsterdam and research fellow at the Tinbergen Institute since 1999. He fullfills editorial duties at the Journal of Applied Econometrics, the Journal of Forecasting, the Journal of Multivariate Analysis and Statistica Sinica.