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Nota di contenuto	<p>""Time Series Analysis: Forecasting and Control""; ""Contents "";</p> <p>""Preface to the Fifth Edition""; ""Preface to the Fourth Edition"";</p> <p>""Preface to the Third Edition""; ""Chapter 1: Introduction""; ""1.1 Five Important Practical Problems""; ""1.1.1 Forecasting Time Series"";</p> <p>""1.1.2 Estimation of Transfer Functions""; ""1.1.3 Analysis of Effects of Unusual Intervention Events to a System""; ""1.1.4 Analysis of Multivariate Time Series""; ""1.1.5 Discrete Control Systems""; ""1.2 Stochastic and Deterministic Dynamic Mathematical Models""</p> <p>""1.2.1 Stationary and Nonstationary Stochastic Models for Forecasting and Control""""1.2.2 Transfer Function Models""; ""1.2.3 Models for Discrete Control Systems""; ""1.3 Basic Ideas in Model Building""; ""1.3.1 Parsimony""; ""1.3.2 Iterative Stages in the Selection of a Model"";</p> <p>""Appendix A1.1 Use of the R Software""; ""Exercises""; ""Part One: Stochastic Models and Their Forecasting""; ""Chapter 2: Autocorrelation Function and Spectrum of Stationary Processes""; ""2.1 Autocorrelation Properties of Stationary Models""; ""2.1.1 Time Series and Stochastic Processes""</p>

""2.1.2 Stationary Stochastic Processes""""2.1.3 Positive Definiteness and the Autocovariance Matrix""; ""2.1.4 Autocovariance and Autocorrelation Functions""; ""2.1.5 Estimation of Autocovariance and Autocorrelation Functions""; ""2.1.6 Standard Errors of Autocorrelation Estimates""; ""2.2 Spectral Properties of Stationary Models""; ""2.2.1 Periodogram of a Time Series""; ""2.2.2 Analysis of Variance""; ""2.2.3 Spectrum and Spectral Density Function""; ""2.2.4 Simple Examples of Autocorrelation and Spectral Density Functions""  
 ""2.2.5 Advantages and Disadvantages of the Autocorrelation and Spectral Density Functions""""Appendix A 2.1 Link Between the Sample Spectrum and Autocovariance Function Estimate""; ""Exercises""; ""Chapter 3: Linear Stationary Models""; ""3.1 General Linear Process""; ""3.1.1 Two Equivalent Forms for the Linear Process""; ""3.1.2 Autocovariance Generating Function of a Linear Process""; ""3.1.3 Stationarity and Invertibility Conditions for a Linear Process""; ""3.1.4 Autoregressive and Moving Average Processes""; ""3.2 Autoregressive Processes""  
 ""3.2.1 Stationarity Conditions for Autoregressive Processes""""3.2.2 Autocorrelation Function and Spectrum of Autoregressive Processes""; ""3.2.3 The First-Order Autoregressive Process""; ""3.2.4 Second-Order Autoregressive Process""; ""3.2.5 Partial Autocorrelation Function""; ""3.2.6 Estimation of the Partial Autocorrelation Function""; ""3.2.7 Standard Errors of Partial Autocorrelation Estimates""; ""3.2.8 Calculations in R""; ""3.3 Moving Average Processes""; ""3.3.1 Invertibility Conditions for Moving Average Processes""  
 ""3.3.2 Autocorrelation Function and Spectrum of Moving Average Processes""

## Sommario/riassunto

Praise for the Fourth Edition "The book follows faithfully the style of the original edition. The approach is heavily motivated by real-world time series, and by developing a complete approach to model building, estimation, forecasting and control." "Mathematical Reviews Bridging classical models and modern topics, the Fifth Edition of Time Series Analysis: Forecasting and Control maintains a balanced presentation of the tools for modeling and analyzing time series. Also describing the latest developments that have occurred in the field over the past decade through application