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Nota di contenuto	SHORT-MEMORY LINEAR PROCESSES AND ECONOMETRIC APPLICATIONS; List of Tables; Preface; Acknowledgments; 1 INTRODUCTION TO OPERATORS, PROBABILITIES AND THE LINEAR MODEL; 1.1 Linear Spaces; 1.2 Normed Spaces; 1.3 Linear Operators; 1.4 Hilbert Spaces; 1.5 L(p) Spaces; 1.6 Conditioning on -fields; 1.7 Matrix Algebra; 1.8 Convergence of Random Variables; 1.9 The Linear Model; 1.10 Normalization of Regressors; 1.11 General Framework in the case of K Regressors; 1.12 Introduction to L(2)-Approximability; 2 L (p)-APPROXIMABLE SEQUENCES OF VECTORS 2.1 Discretization, Interpolation and Haar Projector in L(p)2.2 Convergence of Bilinear Forms; 2.3 The Trinity and Its Boundedness in l (p); 2.4 Convergence of the Trinity on L(p)-Generated Sequences; 2.5 Properties of L(p)-Approximable Sequences; 2.6 Criterion of L(p)-Approximability; 2.7 Examples and Counterexamples; 3 CONVERGENCE OF LINEAR AND QUADRATIC FORMS; 3.1 General Information; 3.2 Weak

Laws of Large Numbers; 3.3 Central Limit Theorems for Martingale Differences; 3.4 Central Limit Theorems for Weighted Sums of Martingale Differences
3.5 Central Limit Theorems for Weighted Sums of Linear Processes3.6 L (p)-Approximable Sequences of Matrices; 3.7 Integral operators; 3.8 Classes (p); 3.9 Convergence of Quadratic Forms of Random Variables; 4 REGRESSIONS WITH SLOWLY VARYING REGRESSORS; 4.1 Slowly Varying Functions; 4.2 Phillips Gallery 1; 4.3 Slowly Varying Functions with Remainder; 4.4 Results Based on L(p)-Approximability; 4.5 Phillips Gallery 2; 4.6 Regression with Two Slowly Varying Regressors; 5 SPATIAL MODELS; 5.1 A Math Introduction to Purely Spatial Models; 5.2 Continuity of Nonlinear Matrix Functions
5.3 Assumption on the Error Term and Implications5.4 Assumption on the Spatial Matrices and Implications; 5.5 Assumption on the Kernel and Implications; 5.6 Linear and Quadratic Forms Involving Segments of K; 5.7 The Roundabout Road; 5.8 Asymptotics of the OLS Estimator for Purely Spatial Model; 5.9 Method of Moments and Maximum Likelihood; 5.10 Two-Step Procedure; 5.11 Examples and Computer Simulation; 5.12 Mixed Spatial Model; 5.13 The Roundabout Road (Mixed Model); 5.14 Asymptotics of the OLS Estimator for Mixed Spatial Model; 6 CONVERGENCE ALMOST EVERYWHERE; 6.1 Theoretical Background
6.2 Various Bounds on Martingale Transforms6.3 Marcinkiewicz-Zygmund Theorems and Related Results; 6.4 Strong Consistency for Multiple Regression; 6.5 Some Algebra Related to Vector Autoregression; 6.6 Preliminary Analysis; 6.7 Strong Consistency for Vector Autoregression and Related Results; 7 NONLINEAR MODELS; 7.1 Asymptotic Normality of an Abstract Estimator; 7.2 Convergence of Some Deterministic and Stochastic Expressions; 7.3 Nonlinear Least Squares; 7.4 Binary Logit Models with Unbounded Explanatory Variables; 8 TOOLS FOR VECTOR AUTOREGRESSIONS
8.1 L(p)-Approximable Sequences of Matrix-Valued Functions

Sommario/riassunto

This book serves as a comprehensive source of asymptotic results for econometric models with deterministic exogenous regressors. Such regressors include linear (more generally, piece-wise polynomial) trends, seasonally oscillating functions, and slowly varying functions including logarithmic trends, as well as some specifications of spatial matrices in the theory of spatial models. The book begins with central limit theorems (CLTs) for weighted sums of short memory linear processes. This part contains the analysis of certain operators in Lp spaces and their employment in the derivation of CLTs