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Nota di contenuto	Chapter 1. Introduction to Nonstandard Analysis in Time Series Analysis -- Chapter 2. Parameter Estimation by Quantile Prediction Error -- Chapter 3. Hypotheses Testing by Generalized Empirical Likelihood for Stable Processes -- Chapter 4. Higher Order Efficiency of Generalized Empirical Likelihood for Dependent Data -- Chapter 5. Robust Aspects of Empirical Likelihood for Unified Prediction Error -- Chapter 6. Applications.
Sommario/riassunto	This book integrates the fundamentals of asymptotic theory of statistical inference for time series under nonstandard settings, e.g., infinite variance processes, not only from the point of view of efficiency but also from that of robustness and optimality by minimizing prediction error. This is the first book to consider the generalized empirical likelihood applied to time series models in frequency domain and also the estimation motivated by minimizing quantile prediction error without assumption of true model. It provides the reader with a new horizon for understanding the prediction problem that occurs in time series modeling and a contemporary approach of hypothesis

testing by the generalized empirical likelihood method. Nonparametric aspects of the methods proposed in this book also satisfactorily address economic and financial problems without imposing redundantly strong restrictions on the model, which has been true until now. Dealing with infinite variance processes makesanalysis of economic and financial data more accurate under the existing results from the demonstrative research. The scope of applications, however, is expected to apply to much broader academic fields. The methods are also sufficiently flexible in that they represent an advanced and unified development of prediction form including multiple-point extrapolation, interpolation, and other incomplete past forecastings. Consequently, they lead readers to a good combination of efficient and robust estimate and test, and discriminate pivotal quantities contained in realistic time series models.