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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	1 A Recurrence Plot-based Distance Measure: S. Spiegel et al -- 2 Fast computation of recurrences in long time series: T. Rawald et al -- 3 Unthresholded recurrence plots for complex-valued representations of narrow band signals: A. Sipers et al -- 4 Quantifying redundancy and information content of lines in recurrence plots using the theory of framework rigidity: A. Sipers et al -- 5 Recent advances in non-stationary signal processing based on Recurrence Plot Analysis concept: C. Ioana et al -- 6 A Recurrence-Based Approach for Feature Extraction in Brain-Computer Interface Systems: L.F.S. Uribe et al -- 7 Recurrence plot analysis of the response to active standing of heart rate, systolic blood pressure and systolic blood volume: H. González Gómez -- 8 Recurrence Quantification Analysis as a tool for discrimination among

different dynamics classes - the Heart Rate Variability associated to different age groups: L.dos Santos et al -- 9 Analyzing Social Interactions: The promises and challenges of using Cross Recurrence Quantification Analysis: R. Fusaroli et al -- 10 Cross Recurrence Quantification Analysis of the Influence of Coupling Constraints on Interpersonal Coordination and Communication: M.T.Tolston et al -- 11 Recurrence Quantification as an Analysis for Global Coordination and Complexity Matching: C.A. Coey et al -- 12 Synchronicity Assessment using a Non-Parametric Dynamic Dissimilarity Measure: P. Crowley et al -- 13 Understanding the Interrelationship Between Commodity & Stock Indices Daily Movement Using ACE and Recurrence Analysis: K. Guhathakurta et al.

Sommario/riassunto

This book features 13 papers presented at the Fifth International Symposium on Recurrence Plots, held August 2013 in Chicago, IL. It examines recent applications and developments in recurrence plots and recurrence quantification analysis (RQA) with special emphasis on biological and cognitive systems and the analysis of coupled systems using cross-recurrence methods. Readers will discover new applications and insights into a range of systems provided by recurrence plot analysis and new theoretical and mathematical developments in recurrence plots. Recurrence plot based analysis is a powerful tool that operates on real-world complex systems that are nonlinear, non-stationary, noisy, of any statistical distribution, free of any particular model type, and not particularly long. Quantitative analyses promote the detection of system state changes, synchronized dynamical regimes, or classification of system states. The book will be of interest to an interdisciplinary audience of recurrence plot users and researchers interested in time series analysis of complex systems in general.