

Contents

A new unsupervised classification technique through nonlinear non parametric mixed effects models	1
Laura Azzimonti, Francesca Ieva, and Anna Maria Paganoni	
Estimation approaches for the apparent diffusion coefficient in Rice-distributed MR signals	13
Stefano Baraldo, Francesca Ieva, Luca Mainardi, and Anna Maria Paganoni	
Longitudinal patterns of financial product ownership: a latent growth mixture approach	27
Francesca Bassi and José G. Dias	
Computationally efficient inference procedures for vast dimensional realized covariance models	39
Luc Bauwens and Giuseppe Storti	
A GPU software library for likelihood-based inference of environmental models with large datasets	53
Michela Cameletti and Francesco Finazzi	
Theoretical Regression Trees: a tool for multiple structural-change models analysis	67
Carmela Cappelli and Francesca Di Iorio	
Some contributions to the theory of conditional Gibbs partitions	83
Annalisa Cerquetti	
Estimation of traffic matrices for LRD traffic	97
Pier Luigi Conti, Livia De Giovanni, and Maurizio Naldi	

A Newton’s method for benchmarking time series	115
Tommaso Di Fonzo and Marco Marini	
Spatial smoothing for data distributed over non-planar domains	129
Bree Ettinger, Tiziano Passerini, Simona Perotto, and Laura M. Sangalli	
Volatility swings in the US financial markets	143
Giampiero M. Gallo and Edoardo Otranto	
Semicontinuous regression models with skew distributions	157
Anna Gottard, Elena Stanghellini, and Rosa Capobianco	
Classification of multivariate linear-circular data with nonignorable missing values	171
Francesco Lagona and Marco Picone	
Multidimensional connected set detection in clustering based on nonparametric density estimation	185
Giovanna Menardi	
Using integrated nested Laplace approximations for modelling spatial healthcare utilization	197
Monica Musio, Erik-A. Sauleau, and Valentina Mameli	
Supply function prediction in electricity auctions	213
Matteo Pelagatti	
A hierarchical bayesian model for RNA-Seq data	225
Davide Risso, Gabriele Sales, Chiara Romualdi, and Monica Chiogna	