

## FOREWORD

### Special Number on Time Series Analysis

This issue contains six invited papers on time series analysis, written by well known experts in the field. David Stoffer and Hernando Ombao extend Stoffer's and co-authors seminal work on spectral envelope to study local behavior in categorical-valued time series. Pedro Galeano and Daniel Peña review applications of classical multivariate techniques for clustering, discriminant analysis and dimension reduction for time series data. Raquel Prado, Gabriel Huerta and Mike West review the class of time-varying autoregressive (TVAR) models and related recent developments of Bayesian time series modelling, useful for non-stationary series. David Brillinger considers the case of time series at scattered (irregular) time points and develops tests for whiteness, applying the results to an interesting Brazilian time series. Robert Shumway reviews the dynamic linear model in state space form and generalizes to a situation where the measurement equation admits fixed covariates while treating the state vectors as time varying random effects, providing applications to environmental series. Finally, Rainer Dahlhaus and Michael Sahn discuss a generalization of the Whittle likelihood approximation from stationary processes to the class of locally stationary processes as introduced by Dahlhaus and that has had a great impact in recent research.

I am sure the readers of *Resenhas* will enjoy reading these papers as I did and benefit from the lucid expositions presented. On behalf of the Editorial Board of *Resenhas* I would like to thank the contributors for their generous support and inspiring work.

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Pedro A. Morettin

Editor