
Preface

The material of this volume was inspired by selected papers presented at SPE 2011, the XIX Annual Congress of the Portuguese Statistical Society. The annual congress of SPE is the most important statistics meeting taking place every year in Portugal, constituting a primary forum for dissemination of Statistics in Portugal and a privileged channel for scientific exchange between members of SPE and other statistical societies.

SPE 2011 was organized by Instituto Superior Técnico—Technical University of Lisbon and the School of Technology and Management—Polytechnic Institute of Leiria, by invitation from the Directive Board of the Portuguese Statistical Society (SPE). It took place from September 28 to October 1, at Hotel Miramar Sul, in the beautiful picturesque Portuguese sea town of Nazaré.

SPE 2011 continued paving the success of previous SPE congresses having an attendance in excess of 200 participants and included 140 communications from authors from 11 countries (Argentina, Austria, Brazil, England, Germany, the Netherlands, Portugal, Scotland, Spain, Switzerland, and the USA), aside from a 1-day mini-course on Longitudinal Data Analysis, given by M. Salomé Cabral (University of Lisbon) and M. Helena Gonçalves (University of Algarve).

For the pleasant and stimulating scientific and social environment enjoyed by participants in the event, we must thank in a very special way the members of the Organising Committee (Alexandra Seco, António Pacheco, Helena Ribeiro, M. Rosário de Oliveira, Miguel Felgueiras, and Rui Santos) and the Scientific Committee (António Pacheco, António St. Aubyn, Carlos A. Braumann, Carlos Tenreiro, and M. Ivette Gomes).

Last but not least, we must also thank the following four distinguished invited plenary speakers who have honoured us by contributing the first four papers of the volume: Fernando Rosado (University of Lisbon), Graciela Boente (Universidad de Buenos Aires), João A. Branco (Technical University of Lisbon), and M. Ivette Gomes (University of Lisbon).

The publication of this volume, which is the last stone in the SPE 2011 building, aims to disseminate some of the most important contributions presented at SPE 2011 to the international scientific community. The papers included in the volume mix in a nice way new developments in the theory and applications of Probability

and Statistics. There is a total of 27 papers which, for the convenience of readers, were arranged into the following four parts:

- Statistical Science
- Probability and Stochastic Processes
- Extremes
- Statistical Applications

The editors would like to thank all authors who submitted papers to the volume, the anonymous referees for their insightful criticism and excellent reviewing work that contributed to improve the scientific quality and presentation of the accepted papers, and the current Directive Board of SPE, especially Vice President Pedro Oliveira, for assistance during the preparation of this volume. The included papers were accepted for publication after a careful international review process that involved a minimum of 2 referees per paper and a total of more than 70 referees from 10 countries (Argentina, Belgium, France, Germany, Italy, Portugal, Russia, Spain, Switzerland, and the USA).

The editors are very pleased that their work comes to an end at the International Year of Statistics (Statistics 2013), which is a moment of worldwide celebration and recognition of the contributions of statistical science to the humanity. In addition, for them as well as for all participants in SPE 2011, it is a fond remembrance the fact that SPE 2011 paid tribute to the following former presidents of SPE who had retired in the previous year:

- M. Ivette Gomes (1990–1994)
- João A. Branco (1994–2000)
- Fernando Rosado (2000–2006)

SPE wanted, with the tribute, to thank these former popular presidents of SPE for their invaluable work for the progress of the Portuguese Statistical Society and its national and international recognition, as well as for the development of statistics in Portugal, and pay homage also to their strong personal qualities. In this respect, we and SPE would like to provide our most sincere thanks to Isabel Fraga Alves, Manuela Souto de Miranda, and M. Manuela Neves for having promptly and very kindly accepted to be first instance spokespersons in the tribute sessions of M. Ivette Gomes, João A. Branco, and Fernando Rosado, respectively. It was also very moving to the editors and the Organising Committee of SPE 2011 the fact that this event took place close to the end of the mandate as president of SPE of

- Carlos A. Braumann (2007–2011)
- whose support, as well as that of the Directive Board of SPE, was invaluable and decisive for the great success of SPE 2011.

Lisbon, Portugal

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Leiria, Portugal
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