Foreword from the Editors

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For some 12 years, the statistics group at Waseda University, under the lead of Professor Taniguchi, has been organizing a series of international workshops and symposia devoted to recent trends and developments in the statistical analysis of stochastic processes, multivariate analysis, high-dimensional data, information geometry, signal processing, econometric theory and financial engineering, all in close relation with the group's research activity on inference theory for portfolio estimation and empirical likelihood for a variety of stochastic processes.

Those meetings have been organized on a regular basis, with the generous support of the Japan Society for the Promotion of Science (fundings: Kiban (A-15H02061) and Houga (26540015), M. Taniguchi, Research Institute for Science and M. Taniguchi, Research Institute for Science and Engineering, Waseda University); some of them were held in association with the “Brussels-Waseda Statistics Seminars” co-funded by the Belgian Fonds National de la Recherche Scientifique, some others with the “New Developments in Econometrics and Time Series” series of workshops funded by the Deutsche Forschungsgemeinschaft.

For the period 2015–2017 only, no less than nine events took place in this context, on the subject “High Dimensional Statistical Analysis for Spatio-Temporal Processes and Quantile Analysis for Time Series”, in Tokyo (Waseda University: November 9–11, 2015; February 29–March 2 and October 24–26, 2016; February 27–March 1, 2017), Hakone (November 12–14, 2015), Kumamoto (March 3–5, 2016), Hokkaido (October 27–29, 2016), Keio (March 2–4, 2017), and Ise-Shima (March 5–7, 2017).

Thanks to the efforts of Professor Taniguchi and his collaborators, those seminars have become increasingly popular, and have attracted a number of prominent participants, from abroad as well as from Japan fostering bilateral and international collaboration. Invited

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speakers include F. Akashi, M. Aoshima, A. Bose, N.H. Chan, C. Chen, R. A. Davis, W. Dunsmuir, L. Giraitis, Mei-Hui Guo, M. Hallin, X. He, J. Hirukawa, H.C. Huang, S.H. Kato, C.K. Ing, R. Koenker, C. Kun, H.R. Kuensch, Y. Kutoyants, S. Lahiri, S. Lee, G. Lin, Y. Liu, A. Luati, I. Negri, Y. Nishiyama, H. Ogata, Y. Ogata, A. Pewsey, M. Pourahmadi, T. Proietti, R. Shibata, Y. Shimizu, H. Shiraishi, K. Tanaka, M. Taqqu, D. Xiaoling, and many others.

With this special issue of *Statistical Inference for Stochastic Processes*, we would like to pay tribute to Professor Taniguchi's unremitting efforts in the organization of those scientific events, and the exceptional service they rendered to the time series community. The issue consists of a selection of contributions from the participants to some of the 2015 workshops. All of them have been carefully refereed in accordance with the standards of the journal. Professor Taniguchi has been helping us as Guest Editor, and we heartly thank him for his contribution.

Marc Hallin and Yuri Kutoyants, September 2017

About the Guest Editor

Masanobu Taniguchi received B.S. degree in Mathematics, M.S. and Dr. degrees in Mathematical Science from Osaka University, in 1974, 1976 and 1981, respectively. He currently is Professor in the Department of Applied Mathematics and, since 2011, Research Importance Professor at the Research Institute for Science and Engineering, both at Waseda University, Tokyo. His research interests include time series analysis, mathematical statistics, multivariate analysis, information geometry, signal processing, econometric theory and financial engineering. His main contributions in time series analysis are collected in his book: "*Asymptotic Theory of Statistical Inference for Time Series*" (Springer 2000). He also is the author or coauthor of "*Statistical Inference for Financial Engineering*" (Springer 2014), and "*Portfolio Estimation*" (CRC Press 2017). He received several prestigious awards, including the Ogawa Prize, the Econometric Theory Award, the Japan Statistical Society Prize, and, in 2013, the Analysis Award of the Mathematical Society of Japan. A Fellow of the Institute of Mathematical Statistics, he has been Editor-in-Chief of the *Journal of the Japan Statistical Society* (2006–2009).