Editorial

This issue of *Statistics and Its Interface* is a special issue devoted to *Empirical Likelihood*. Empirical likelihood is a modern statistical inference method which was proposed by Art Owen in his seminal 1988 *Biometrika* paper and 1990 *The Annals of Statistics* paper (Owen, 1988; Owen, 1990). It is well connected and complementary to both the bootstrap method and the conventional parametric likelihood theory. From the research works established in the past two decades, and as the name has predicted, the empirical likelihood can be indeed regarded as versions of the conventional likelihood, but is formulated in nonparametric or semiparametric settings. The above assertion is well supported by the facts that the empirical likelihood possessing two keys features with the conventional parametric likelihood: the Wilks theorem and the Bartlett correction, for a wide range of inference problems. The past two decades have seen a rapid growth on the study of the empirical likelihood method, extending both the theoretical insights on the basic properties and the applications to real statistical problems.

We are very fortunate to have Professor Liang Peng from Georgia Institute of Technology to be the guest editor, who has contributed significantly to the study of the empirical likelihood himself. Professor Liang has gathered a set of leading experts on the empirical likelihood. As the readers may appreciate, the papers appearing in this special issue cover a broad range of topics and research problems which can be solved by the empirical likelihood. The papers include adjusting the empirical likelihood for higher order coverage accuracy in Chen and Liu, combining the jackknife method for case-control studies by Jing, Li and Qin and Zhou, the blocking method for dependent spatial Markov models by Kaiser and Nordman, missing data imputation by Qin and Wang, high dimensional data by Lahiri and Mukhopadhyay, survival analysis by Ren and Riddlesworth, the two sample inferences by Wu, robust statistics by Zheng, Zhao and Yu, and general nonparametric and semiparametric models in Zhu and Xue. I hope the readers find the papers as stimulating and useful as much as I do.

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