

Special Issue

Research Progress and Application of Bayesian Statistics

Message from the Guest Editor

The Bayesian method provides a natural and coherent framework for statistical inference and prediction. Its usage was, however, limited in the past due to computational complexity. During the past few decades, there has been an increasing interest in Bayesian statistical modeling thanks to advances in computing capabilities and estimation methods such as Markov chain Monte Carlo (MCMC) and Integrated Nested Laplace Approximation (INLA). This Special Issue aims to provide a collection of papers highlighting recent advances in theories and applications using Bayesian statistics. Bayesian methods have been widely used across different disciplines, and as such, this Special Issue welcomes contributions from different fields, such as medicine, epidemiology, engineering, economics, and business. Submissions can be in the form of original research or reviews. Examples of areas of interest include but are not limited to missing data handling; variable/feature selection; time-series analysis; comparison of different estimation methods (e.g., variants of MCMC methods and INLA); comparison between Bayesian and classical methods using real-world examples; analysis of big data.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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