# Special Issue

# Bayesian Statistics and Causal Inference

### Message from the Guest Editors

In recent decades, causal inference and Bayesian statistics have experienced remarkable developments due to the rise in the interest of scholars across many fields. Causal inference aims to estimate the causal effects of a treatment or an exposure on a response of interest. This task is of paramount importance in many contexts, including, for example, medicine, economics and public health. Still, drawing causal conclusions from data requires assumptions and methods that differ from those used in traditional associational studies. Bayesian statistics provides a way to combine researchers' prior information with that coming from data. In recent years, some attempts have been made to integrate the two approaches to exploit their strengths. This Special Issue is open to methodological and applied works which can provide insightful contributions to the topic and show the advantages of combining the two 'worlds'. Examples of possible subjects include, but are not limited to, high-dimensional data, graphical models, machine learning, nonparametric estimation and computational aspects. Contributions from different fields are welcome.

### Guest Editors

Dr. Antonino Abbruzzo

Department of Economics, Business and Statistics, Università degli Studi di Palermo, Viale delle Scienze, Ed. 13, 90138 Palermo, Italy

Dr. Chiara Di Maria

Department of Economics Business and Statistics, University of Palermo, Viale delle Scienze, ed. 13, 90128 Palermo, Italy

### Deadline for manuscript submissions

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*Mathematics*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
mathematics@mdpi.com

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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.

## Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

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