

Special Issue

Advances in Flexible Parametric Distributions for Modeling Skewness and Kurtosis

Message from the Guest Editor

This Special Issue aims to highlight recent advances in the development and use of flexible parametric probability distributions designed to model empirical data that exhibit skewness and/or high levels of kurtosis—features frequently encountered in applied research across fields such as engineering, public health, and the social sciences. We welcome contributions that introduce new distributional forms, explore their theoretical properties, or apply flexible models to empirical data where traditional approaches are insufficient. Submissions addressing computational aspects—such as estimation algorithms, simulation procedures, or software tools—are especially encouraged, as they improve accessibility and reproducibility. Comparative studies and methodological evaluations that highlight the advantages of modeling asymmetry and kurtosis are also of interest. By concentrating on this focused theme, this Special Issue aims to compile a coherent set of articles that advance statistical modeling for data with non-normal characteristics, offering both theoretical insights and practical tools.

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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