



Recent Research on Functions with Non-Independent Variables

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Message from the Guest Editor

Dear Colleagues,

The use of independent input variables leads to the development of highly limited mathematical and statistical tools for functional analysis.

Non-independent variables arise when two or more variables do not vary freely and are widely encountered in different scientific fields such as data analysis, quantitative risk analysis, inverse problems, and uncertainty quantification. Such variables are often characterized by their covariance matrices, distribution functions, copulas, and weighted distributions. Recently, dependency models have provided explicit functions that link these variables together by means of additional independent variables.

This Special Issue will focus on mathematical and statistical analysis of functions with non-independent variables in different aspects of model development, such as model calibration, model validation, robustness analysis, optimization, model uncertainty, and model reduction.





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Message from the Editor-in-Chief

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