Variable-Order Fractional Problems: Modeling, Analysis, Approximation and Application

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Message from the Guest Editors

Dear Colleagues,

Variable-order fractional problems have attracted increasing attention in recent decades, with growing successful applications in various fields. Compared with their constant-order fractional analogues, the variability of the fractional order provides an extra dimension to improve the modeling capability of these models for complex phenomena. Furthermore, one could connect the fractional problems and their integer-order counterparts by adjusting the variable fractional order. However, the introduction of the variable order in fractional models leads to several mathematical and numerical difficulties that have not been previously encountered, and corresponding studies are far from well-developed.

This Special Issue aims to promote the investigation of variable-order fractional problems from all aspects, such as modeling, numerical methods and analysis, theoretical analysis, and applications. We invite you to submit comprehensive review papers and original articles on the above mentioned topic.

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Special Issue