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Fractional Evolutionary Equations and Modeling of Dissipative Processes

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Message from the Guest Editors

Dear Colleagues,

The Special Issue is devoted to the application of fractional-order evolutionary differential equations to the description of dissipative systems and processes. Generally, a dissipative system is understood as any open (non-conservative) system located far from the state of thermodynamic equilibrium. Dissipative processes include various irreversible thermodynamic processes, mass, electrical and heat transfer, mechanical motion of damped systems, chemical reactions, radiation and absorption of electromagnetic waves, etc. Particular attention will be paid to the study of initial and boundary value problems for partial differential equations of fractional order, which are the basis for mathematical models of dissipative systems and processes.

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