Special Issue

Fractional Evolutionary Equations and Modeling of Dissipative Processes

Message from the Guest Editors

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.

Guest Editors

Prof. Dr. Arsen V. Pskhu

Institute of Applied Mathematics and Automation, Kabardino-Balkarian Scientific Center of Russian Academy of Sciences, 89-A Shortanov Street, 360000 Nalchik, Russia

Dr. Roman Parovik

Physical Processes Modeling Laboratory, Institute of Cosmophysical Research and Radio Wave Propagation, Far Eastern Branch of the Russian Academy of Sciences, Kamchatskiy Kray, 684034 Paratunka, Russia

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Editor-in-Chief

Prof. Dr. Carlo Cattani
Engineering School (DEIM), University of Tuscia, Largo dell'Università, 01100 Viterbo, Italy

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