Special Issue

Research in Special Functions

Message from the Guest Editors

This Special Issue aims to present novel results for special functions arising in various areas of contemporary mathematics, including mathematical physics, theory of ODE and PDE, number theory, discrete mathematics, harmonic analysis, theory of integral transforms, Lie groups and Lie algebras representation theory, q-calculus, fractional calculus, etc. We expect that this Special Issue will address both classical special functions and their numerous extensions, including q-analogues, fractional analogues, and hyper (multi-index) analogues. We look forward to receiving your contributions including new properties, integrals, series and recurrent relations, formulas for asymptotic behavior and values of integral operators, new results for analytic continuations, etc. We invite authors to present new theorems describing connections between special functions of mathematical physics and their q-analogues with classical Lie groups and algebras and quantum groups and Hopf algebras, respectively. We are also interested in various applications of special functions, since "A function is a special function if it occurs often enough so that it gets a name" (Richard Askey).

Guest Editors

Prof. Dr. Ilya Shilin

1. Department of Higher Mathematics, National Research University MPEI, Moscow 111250, Russia
2. Department of Algebra, Moscow State Pedagogical University, Moscow 119991, Russia

Prof. Dr. Junesang Choi

Department of Mathematics, Dongguk University, Wise Campus, Gyeongju 38066, Republic of Korea

Deadline for manuscript submissions

closed (28 February 2025)

Symmetry

MDPI

About the Journal

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

Prof. Dr. Sergei Odintsov
1. ICREA, 08010 Barcelona, Spain
2. Institute of Space Sciences (IEEC-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

Author Benefits

Open Access:
free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:
indexed within SCIE (Web of Science), Scopus, CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:
JCR - Q2 (Multidisciplinary Sciences) / CiteScore - Q1 (General Mathematics)