symmetry

an Open Access Journal by MDPI

IMPACT FACTOR 2.2

CITESCORE 5.4

Symmetry/Asymmetry Study in Hopf-Type Algebras and Groups

Guest Editor:

Prof. Dr. Shuanhong Wang
Shing-Tung Yau Center, School of Mathematics, Southeast University, Nanjing 210096, China

Deadline for manuscript submissions:
closed (15 February 2024)

Message from the Guest Editor

Dear Colleagues,

Noncommutative geometry is used to deal with noncommutative algebras, which are the algebras of functions on “noncommutative spaces” such as groups, groupoids and quasigroups. Noncommutative geometry can be used to express notions, structures, and techniques useful in handling usual geometric spaces in terms of the algebra of functions including symmetry and asymmetry, and then to generalize them to the noncommutative setting. A structure which has been successfully generalized in that way is that of a group, resulting in the notion of a noncommutative and noncommutative Hopf algebra or quantum group.

Generalisations of Hopf algebras have quite a long history. To date, there are two classes. One is that such generalisations are the changing of some of the algebraic conditions that enter the definition of a Hopf algebra. A few examples include weak Hopf algebras, quasi Hopf algebras, Hopf group-coalgebras , hom-Hopf algebras and Hopf quasigroups. The other is that when we consider the functional algebras on an infinite group or a groupoid we have the theory of multiplier Hopf algebra or the theory of weak multiplier Hopf algebra.

symmetry

IMPACT FACTOR 2.2

CITESCORE 5.4

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Sergei D. Odintsov
1. Institució Catalana de Recerca i Estudis Avançats (ICREA), Passeig Luis Companys, 23, 08010 Barcelona, Spain
2. Institute of Space Sciences (ICE-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.
Journal Rank: JCR - Q2 (*Multidisciplinary Sciences*) / CiteScore - Q1 (General Mathematics)

Contact Us

Symmetry Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/symmetry
symmetry@mdpi.com
X @Symmetry_MDPI