



## Bipartite Graphs, Gauge Theories and Mirror Symmetry

Guest Editor:

**Prof. Dr. Yang-Hui He**

1. London Institute for  
Mathematical Sciences, Royal  
Institution, London W1S 4BS, UK  
2. Merton College, University of  
Oxford, Oxford OX1 4JD, UK

Deadline for manuscript  
submissions:

**closed (31 May 2017)**

### Message from the Guest Editor

Dear Colleagues,

We are compiling a Special Issue for Symmetry on the topic of quiver gauge theories, bipartite graphs and mirror symmetry. There has been a host of activity over the last decade on this exciting development, which resides at the intersection between quantum field theory, quiver representation theory, algebraic geometry and number theory, and has emerged as an important subject in mathematical physics. There have been several international conferences and workshops devoted to this area, and an increasing number of theoretical physicists, as well as pure and applied mathematicians, have been making contributions.

The purpose of the current volume is to gather some of these developments. The topics include, but are not limited to, the following:

- Supersymmetric Gauge Theory
- Affine Calabi-Yau Varieties
- Mirror Symmetry
- Quivers

Prof. Dr. Yang-Hui He

Guest Editor



[mdpi.com/si/8210](https://mdpi.com/si/8210)

# Special Issue



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*); Q1 (*Physics and Astronomy*); Q1 (*Computer Science*)

## Contact Us

Symmetry Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

mdpi.com/journal/symmetry  
symmetry@mdpi.com  
X@Symmetry\_MDPI