



Protection of Graphs

Guest Editor:

**Prof. Dr. Juan Alberto
Rodríguez Velázquez**

Departament d'Enginyeria
Informàtica i Matemàtiques,
Universitat Rovira i Virgili, 43003
Tarragona, Spain

Deadline for manuscript
submissions:

closed (30 January 2020)

Message from the Guest Editor

This Special Issue invites you to contribute your original research work and review articles on “Protection of Graphs”. For vertex v of a simple graph G , let $f(v)$ be the number of entities stationed at v . Depending on the problem, with the graph, we want to model an entity that could consist of a robot, an observer, a guard, a legion, and so on. An entity at v can deal with a problem at any vertex in its closed neighbourhood. There are several strategies, that is, properties of such functions, under which the entire graph may be deemed protected. Among the most studied properties, the following stand out: domination, total domination, Roman domination, weak Roman domination, and secure domination. The corresponding parameters that give the minimum number of entities required to protect the graph under the various strategies have been extensively studied. This Special issue invites contributions addressing new results on these topics, both from a theoretical and an applied point of view.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Sergei 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 SCIE (Web of Science), Scopus, 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