



Algebraic Structures and Graph Theory

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Message from the Guest Editors

Connections between algebraic structure theory and graph theory have been established in order to solve some open problems in one theory with the help of the tools existing in the other, to emphasize the remarkable properties of one theory with techniques involving the second, providing new methods for solving some problems. One very well-known example in this direction is the contribution of Artur Cayley, who defined the concept of a group in 1854 (the composition table of the operation on the group takes his name—i.e., the Cayley table) and described in 1878 the structure of a group by a special graph, called a Cayley graph. There are many ways to define an algebraic structure (as a group, ring, hypergroup, lattice, etc.), starting from a graph.

This Special Issue accepts original and high-level contributions, where a connection between algebraic structures and graph theory is clearly presented. New theoretical aspects as well as practical applications representing current research directions on this topic are welcome. We also invite authors to submit high-quality review papers on the aforementioned topic.





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Message from the Editor-in-Chief

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