

Discrete and Combinatorial Algebraic Topology, Theory and Applications Special Session B16

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Extending techniques from algebraic topology to discrete and combinatorial objects such as graphs and finite posets has recently generated an increased amount of interest from researchers working in a variety of areas of mathematics. Several different parts of algebraic topology have undergone at least a partial ‘discretization’ so far, the most notable being homotopy theory, Morse theory, and sheaf theory, and efforts to make the discrete theories more complete are ongoing. The work has already found numerous applications, including to hyperplane arrangements, dynamical systems, geometric group theory, coarse geometry, configuration spaces, distributed computing, graph colorings, and digital imaging, as well as to network and data analysis. The goal of this session is to bring together researchers who are currently working in discrete algebraic topology with researchers who work in closely related areas in order to expand the mathematical applications of discrete-algebraic-topological techniques and disseminate recent developments in the field.

This special session will take place on July 25th-26th, 2024.

For more information visit <https://sites.google.com/cimat.mx/umi-ams-discrete-alg-top>.