

Signed Graph Theory: Extensions and Applications

RSVP**MONDAY***September 29rd***TIME***6:30 PM - 7:30 PM***LOCATION***C 103***SPEAKER****Cheolwon Heo***Professor***Dept. of Applied Math & Statistics
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In this introductory talk, we will explore various approaches to extending fundamental concepts and theorems of graph theory to signed graphs, focusing particularly on the connections with Laplacian spectrum and graph coloring. Signed graphs were first introduced by Harary (1953) through the foundational concepts and balance theory, and were later systematically developed by Zaslavsky (1982) within broader geometric and combinatorial frameworks.

We will discuss the properties and key concepts of signed graphs, examining how familiar results in graph theory reveal new insights when applied to signed graphs.

Through this exploration, we aim to highlight the potential applications and expanded perspectives that signed graph theory offers.