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"Arithmetical Structures on Graphs"

Monday, Sept 23, 2024 Talk at 4:15 – Hilles 109 Tea 4:00 – Foyer outside of H109

Abstract:

This talk will discuss recent results in the study of arithmetical structures on graphs, which are a generalization of the Laplacian of a graph. They can be defined as integer labelings on the vertices of a graph that satisfy some divisibility condition. Dino Lorenzini originally defined them in order to answer some questions in algebraic geometry, but more recently, they have been studied on their own, particularly with a combinatorics and algebraic lens. In this talk, we will discuss recent enumerative results related to arithmetical structures. All are welcome to attend as no background will be assumed.

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