Zoom for Thought

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Introduction to Spectral Graph Theory

Abstract:

Given a graph G, one can compute the eigenvalues of its adjacency matrix A_G . Remarkably, these eigenvalues can tell us quite a bit about the structure G. More generally, spectral graph theory consists of taking a graph G, associating to it a matrix M_G , and then using algebraic properties of M_G to recover combinatorial information about G. In this talk we discuss some of the more common applications of spectral graph theory, as well as a very simple proof of the sensitivity conjecture due to Huang.

Tuesday, March 30, 2021 2:00 PM Please see email with subject "Zoom for Thought Information."