NORTHERN ARIZONA UNIVERSITY

Department of Mathematics and Statistics
Colloquium
Tuesday January 23
AMB 164 4:00 - 5:00 pm

The Matrix Tree Theorem and beyond

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Abstract

Abstract: A spanning tree of a graph is a connected subgraph with minimum number of edges. There may be a lot of spanning trees in a given graph. For example, the complete graph K_n has n^{n-2} spanning trees. The number of spanning trees in a graph is given by Matrix Tree Theorem in terms of eigenvalues of Laplacian matrix. A similar result for signless Laplacian will be presented.

This self-contained talk may be of interest to you if you teach discrete mathematics or you would like to see an application of Linear Algebra.

Refreshments at 3:45