



Department of Mathematics and Statistics

Colloquium

Tuesday January 28

AMB 164 4:00 - 5:00 pm

Tutte polynomials, critical points, and log-concavity

Michael Falk

Northern Arizona University

Abstract

This will be a broad expository talk, introducing the Tutte polynomial of a matroid or graph, exposing its connections with graph-coloring, linear codes, and knot theory, and showing an application to “critical loci of master functions” due to Graham Denham, Mehdi Garroussian, and Matthias Schulze. Finally I will explain how the last result was used by June Huh to prove the first of his results on log-concavity of graph and matroid polynomials.

Refreshments at 3:45