

Combinatorics Seminar

Tuesday Oct 6th, 2015
4:30 PM-5:20 PM in Hume 331

Unimodal f-vectors and h-vectors of trees



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ABSTRACT

Alavi, Malde, Schwenk, and Erdős conjectured in 1987 that the f-vector of the independence complex of any tree is unimodal. I'll show how results and intuition from topological combinatorics can help with this conjecture. Specifically, I'll show that the final segment of the f-vector obeys a certain partial unimodality property, and give new simple proofs that the conjecture holds for certain classes of trees.