

1074-05-217

**Caroline J Klivans** (cjk@math.uchicago.edu), **Art M Duval** (artduval@math.utep.edu) and **Jeremy L Martin\*** (jmartin@math.ku.edu), 405 Snow Hall, 1460 Jayhawk Boulevard, Lawrence, KS 66045. *Spanning trees of shifted simplicial complexes.*

Shifted simplicial complexes are higher-dimensional generalizations of threshold graphs. They are known or conjectured to be extremal with respect to many combinatorial invariants, including face numbers, homology, degree sequence, and Laplacian eigenvalues. Duval and Reiner proved that shifted simplicial complexes have integer Laplacian spectra. We present a weighted generalization of the Duval-Reiner theorem and its consequences for enumeration of simplicial spanning trees. (Received August 22, 2011)