1094-05-289 **Ghodratollah Aalipour** (alipour.ghodratollah@gmail.com) and **Art Duval*** (artduval@math.utep.edu). *Weighted spanning enumerators of color-shifted simplicial complexes.*

A color-shifted complex on r colors is an $(r-1)$-dimensional simplicial complex whose vertices are partitioned into r disjoint color classes, with a linear order on the vertices in each color class, and whose facets satisfy the following conditions: (a) Every facet contains exactly one vertex of each color; and (b) If $v < w$ are two vertices of the same color, then if F is a facet in the complex, and $w \in F$, then $F \backslash \{w\} \cup \{v\}$ is also a facet in the complex. Ehrenborg and van Willigenburg counted weighted spanning trees of Ferrers graphs, which may be described as color-shifted complexes with $r = 2$. We find a factorization of a weighted enumeration of top-dimensional spanning trees of color-shifted complexes on $r = 3$ colors, and we conjecture our technique will extend to all r. The proof relies on the simplicial Matrix-Tree Theorem, and identification of factors, as in Martin and Reiner. (Received August 26, 2013)