Ghodratollah Aalipour (ghodrat.aalipour@ucdenver.edu), Art Duval* (aduval@utep.edu) and Jeremy Martin (jlmartin@ku.edu). Weighted Tree Enumeration of Cubical Complexes.

We find the factorization a weighted enumeration of the (higher-dimensional) spanning trees of skeletons of hypercubes. The key tool is a new version of the weighted cellular matrix-tree theorem, which (under a mild technical assumption) enumerates the spanning trees of a cell complex using its Laplacian matrices. (Received September 20, 2015)