1102-05-140 **Jeremy L. Martin*** (jmartin@math.ku.edu), **Molly Maxwell**, **Victor Reiner** and **Scott O. Wilson**. *Pseudodeterminants and perfect square spanning tree counts.*

The *pseudodeterminant* of a square matrix is the last nonzero coefficient in its characteristic polynomial. When X is an antipodally self-dual CW-sphere of odd dimension $2k-1$, the pseudodeterminant of its kth cellular boundary matrix can be interpreted directly as a torsion-weighted generating function both for k-trees and for $(k-1)$-trees, complementing the analogous result for even-dimensional spheres given by the second author. The argument relies on the topological fact that any self-dual even-dimensional CW-ball can be oriented so that its middle boundary map is skew-symmetric. (Received July 27, 2014)