1035-55-968 **Timothy A Schroeder*** (tas3@uwm.edu), 2924 N Shepard Ave, Milwaukee, WI 53211. *The ℓ^2-homology of even Coxeter groups.*

Given any Coxeter system (W, S), there is an associated CW-complex, $\Sigma(W, S)$ (or simply Σ), on which W acts properly and co-compactly. This is the Davis complex. When the nerve L of (W, S) is a triangulation of an $(n-1)$-sphere, Σ is an n-manifold. We explore a version of the Singer Conjecture for Coxeter groups: When (W, S) is an *even* Coxeter system and L is a 3-sphere, then the reduced ℓ^2-homology of Σ vanishes in all but the middle dimension. (Received September 17, 2007)