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Jennifer Schultens* (jcs@math.ucdavis.edu), Dept of Math, UC Davis, 1 Shields Ave, Davis, CA 95616. *The Kakimizu complexes of select 3-manifolds.*

The Kakimizu complex of a knot is fairly well understood. Its vertices consist of isotopy classes of minimal genus Seifert surfaces; its edges consist of pairs of vertices with disjoint representatives; if the 1-skeleton of an n -simplex lies in the complex, then the n -simplex must also lie in the complex (i.e., it's flag). Moreover, as proved by Johnson-Pelayo-Wilson, the Kakimizu complex of a knot is quasi-Euclidean with dimension equal to the number of tori in the JSJ decomposition of the knot complement.

The Kakimizu complex of a 3-manifold is less well understood. Given a primitive relative second homology class, its vertices consist of isotopy classes of weighted multi-surfaces that represent the class; edges are defined in terms of disjointness of lifts to the canonical cover associated with the class; like the Kakimizu complex of a knot, it is also a flag complex. However, there exist 3-manifolds with hyperbolic Kakimizu complexes.

We will discuss concrete examples of 3-manifolds and their Kakimizu complexes. (Received August 29, 2016)