

The complex of minimal genus Seifert surfaces for hyperbolic knots

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Abstract. This talk focuses on Kakimizu's complex of minimal genus Seifert surfaces for a given link L . These simplicial complexes are defined using a disjointness property and are conjectured to be contractible. While global properties of these complexes are relatively scarce, many local properties have been discovered by Gabai, Sakuma, and Kakimizu. We will discuss these properties, as well as compute several explicit examples for certain classes of links. Further, we will utilize geometric tools like minimal surfaces (those with mean curvature zero) to obtain diameter bounds on these complexes for hyperbolic knots.