1088-57-88 Jessica E. Banks* (jessica.banks@lmh.oxon.org). Minimal genus Seifert surfaces for prime, special alternating links.

The Kakimizu complex MS(L) of a link L is a simplicial complex that records the structure of the set of minimal genus Seifert surfaces for L considered up to ambient isotopy fixing the link. For non-split links, M(L) has been shown by Przytycki–Schultens to be contractible.

This fact is used in proving a result stated by Hirasawa–Sakuma that gives an explicit description of the Kakimizu complex when L is a non-split, prime special alternating link. Such links have a diagram that is both alternating and special (that is, one where one of the two checkerboard surfaces is a Seifert surface), and the Kakimizu complex is described in terms of this diagram. This shows that every minimal genus Seifert for L is a checkerboard surface for some special alternating diagram for L, and also tells us when two different diagrams yield the same Seifert surface. In this talk we will discuss the statement and proof of this result. (Received February 04, 2013)