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Amanda Hager* (amanda-hager@uiowa.edu), University of Iowa, 14 MacLean Hall, Iowa City, IA 52242. *A Calculation of Local System Homology for Discriminantal Arrangements.*

A recent result of Salvetti and Settepanella gives, for a complexified real arrangement \mathcal{A} , an explicit description of a minimal *CW*-complex structure, as well as an explicit algebraic complex which computes local system homology. I apply their techniques to discriminantal arrangements in \mathbb{C}^2 and calculate the boundary maps which will give local system homology groups given any choice of local coordinates. This calculation generalizes several known results; examples are given related to Milnor fibrations and KZ equations. (Received January 28, 2008)