HYPERPLANE ARRANGEMENTS AND COMPACTIFYING THE MILNOR FIBER

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ABSTRACT. Milnor fibers are invariants that arise in the study of hypersurface singularities. A major open conjecture predicts that for hyperplane arrangements, the Betti numbers of the Milnor fiber depend only on the combinatorics of the arrangement. I will discuss how tropical geometry can be used to study related invariants, the virtual Hodge numbers of a hyperplane arrangement's Milnor fiber. This talk is based on joint work with Max Kutler.