

1070-05-128

Priyavrat Deshpande* (pdeshpan@uwo.ca), Mathematics Department, The University of Western Ontario, London, Ontario N6A5B7, Canada. *Complexified Arrangement of Pseudo-hyperplanes.*

To every realizable oriented matroid there corresponds an arrangement of real hyperplanes. The homeomorphism type of the complexified complement of such an arrangement is completely determined by the oriented matroid. The Salvetti complex, a finite cell complex defined using the oriented matroid, is the spine of this complement.

The aim of this talk to extend this correspondence to non-realizable oriented matroids. We generalize the complexification process in order to obtain a subset of a twice dimensional space that has the homotopy type of the associated Salvetti complex. (Received February 06, 2011)