1007-14-199 **Ben T Webster*** (bwebste@math.berkeley.edu), 970 Evans Hall, University of California, Berkeley, CA 94720. *Kazhdan-Lusztig polynomials for hypertoric varieties.*

Hypertoric varieties are hyperkähler analogues of toric varieties. The cohomology of smooth hypertoric varieties is well understood in terms of invariants of hyperplane arrangments, but for singular hypertoric varieties, the topological cohomology is less interesting. However, an analogue of Kazhdan-Lusztig polynomials has a more subtle interpretation in the combinatorics of matroids, via broken circuit complexes. Joint with N. Proudfoot. (Received February 21, 2005)