

1031-14-31

Tom Braden* (braden@math.umass.edu) and **Nicholas Proudfoot**. *A ring structure on intersection cohomology of hypertoric varieties.*

Hypertoric varieties are complex symplectic varieties which can be viewed as “quaternionic” analogs of toric varieties. They are described by the combinatorics of hyperplane arrangements, similarly to the way toric varieties are described by their moment polyhedra. We show that an inductive procedure which computes the T -equivariant intersection cohomology of toric varieties also works essentially unchanged for hypertoric varieties. Unlike the situation for toric varieties, however, we are able to define a canonical ring structure on the intersection cohomology of hypertoric varieties. (Received July 23, 2007)