Intersection cohomology and t-structures

Abstract
Intersection cohomology was originally conceived as a cohomology theory satisfying duality for singular manifolds, but has found significant applications, including in the study of automorphic forms. We motivate intersection cohomology and explain its construction using the abstract notion of (perverse) t-structures, which should be accessible to all. We also describe the relatively new t-structures due to S. Morel which lead to a different construction of intersection cohomology. Time permitting, we explain our recent work on how some of these constructions can be done in the setting of motives, and its consequences.

All are cordially invited