Joseph A Ross* (josephr@usc.edu) and Eric M Friedlander. Intersection theory on singular varieties. Preliminary report.

We introduce some ideas from motivic cohomology into the study of singular varieties. Our approach is modeled on the intersection homology of Goresky-MacPherson; our goal is to intersect cycles on a stratified singular variety provided the cycles do not meet the strata too badly. We define ”perverse” analogues of Chow groups and motivic cohomology. Properties include homotopy invariance, a localization theorem, and a splitting theorem. As a consequence we obtain pairings between certain ”perverse” cycle groups on a singular variety. (Received September 16, 2013)