Anurag K. Singh* (singh@math.utah.edu), Department of Mathematics, University of Utah, 155 South 1400 East, Room 233, Salt Lake City, UT 84112. Annihilation of elements of local cohomology modules. Preliminary report.

We will discuss some results and questions on the existence of big Cohen-Macaulay algebras, and related big algebras. These can be viewed as statements about the annihilation of elements of local cohomology modules. There are powerful theorems along these lines due to Hochster-Huneke, and to Huneke-Lyubeznik. (Received February 13, 2006)