1015-13-187 Florian Enescu^{*}, Department of Mathematics and Statistics, University Plaza, Georgia State University, Atlanta, GA 30303. Local cohomology and Frobenius depth. Preliminary report. The talk will discuss the Frobenius action on local cohomology modules of a d-dimensional local ring with emphasis on the notion of F-depth introduced by Hartshorne and Speiser. A local version of the F-depth will be investigated in relation to the family of F-stable primes. Particular attention will be paid to the Frobenius action on the *i*-th local cohomology module where i < d. (Received February 05, 2006)