Alessandro De Stefani*, Department of Mathematics, University of Nebraska - Lincoln, NE 68588, and Eloísa Grifo and Luis Núñez-Betancourt. Local cohomology of F-pure rings.

We present some results concerning local cohomology modules of a local (or standard graded) F-finite and F-pure ring (R, \mathfrak{m}) . More specifically, we provide certain ranges in which the Lyubeznik numbers of R vanish, and we give a formula to compute them in the case when R is standard graded. Finally, if we write R as a quotient of a regular ring S by an ideal I, we show that every associated prime of the local cohomology modules $H_I^j(S)$ is compatible. This talk is based on joint work with E. Grifo and L. Núñez-Betancourt. (Received January 28, 2018)