Trung Dinh* (dinh@math.utah.edu), Department of Mathematics, University of Utah, Salt Lake City, UT 84112. Associated primes of the example of Brenner and Monsky. Preliminary report.

By work of several authors, many conditions, known to be sufficient and, in some cases, necessary for tight closure to commute with localization, are stated in terms of finiteness of certain set of associated primes, and behavior of exponents needed to annihilate local cohomology. In this talk I will discuss the finiteness of the set of associated primes of Frobenius powers of the ideal in the counterexample of Brenner and Monsky to the localization problem. (Received August 20, 2009)