1014-13-564   **Craig Huneke*** (`huneke@math.ku.edu`), Dept. of Mathematics, Universit y of Kansas, Lawrence, KS 66045, and **M. Katzman. R. Sharp, Y. Yao**. *Bounding Frobenius powers uniformly.* Preliminary report.

This talk will present recent work of M. Katzman, R. Sharp, Y. Yao, and the presenter. Our main theorem uniformly bounds the power of Frobenius needed to take the Frobenius closure of a parameter ideal into the corresponding Frobenius power of the parameter ideal. Such uniform bounds are closely related to the localization problem in tight closure theory.

This talk will review the set of problems in this area, and discuss available techniques, including a basic theorem concerning local cohomology in positive characteristic, due to Hartshorne and Speiser, and generalized by Lyubeznik. (Received September 20, 2005)

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