Melvin Hochster\* (hochster@umich.edu), Mathematics Department, East Hall, University of Michigan, Ann Arbor, MI 48109-1043, and Yongwei Yao. Weak embedding theorems and tight closure.

The talk will discuss joint work with Yongwei Yao giving an embedding theorem for modules of finite projective dimension and a "weak" embedding theorem for modules of finite phantom projective dimension. The emphasis will be on the latter result and its applications to tight closure theory. (Received March 07, 2006)