1030-13-90 Hailong Dao* (hdao@math.utah.edu). On liftable and weakly liftable modules.

Let T be a commutative local ring, and f be a regular element in T. Let R=T/(f). An R-module M is called liftable to T if there is a T-module M' such that f is regular on M' and M=M'/(f). Such a module M would inherit homological properties from M', allowing us to study modules over T instead of R. We will discuss some necessary and sufficient conditions for liftable and weakly liftable (meaning M is a direct summand of a liftable one) modules. (Received July 20, 2007)