1056-13-835 Steven Kleiman, Bernd Ulrich and Javid Validashti* (jvalidas@math.ku.edu). A numerical condition for equisingularity. Preliminary report.

We introduce a notion of multiplicity for finitely generated modules over a Noetherian local ring as a limit superior of a sequence of normalized lengths. We show that our multiplicity can be used to detect integral dependence of modules and we study its application in characterizing numerically the equisingularity conditions. (Received September 17, 2009)