1167-18-68   **Rebekah J. Aduddell*** (`rebekah.aduddell@mavs.uta.edu`). *Critical Degree and Operations on Complexes.* Preliminary report.

Let $(Q, \mathfrak{m}, k)$ be a commutative local Noetherian ring, $f_1, \ldots, f_c$ a Q-regular sequence in $\mathfrak{m}$, and $R = Q/(f_1, \ldots, f_c)$. We present an extension of the notion critical degree for R-modules to the category of totally acyclic R-complexes, $\mathrm{K_{tac}}(R)$. In particular, this talk will focus on how the critical and cocritical degrees of an R-complex change under certain operations on complexes. (Received February 15, 2021)