1158-13-146 **Hannah Altmann** and **Sean Sather-Wagstaff*** (ssather@clemson.edu). *Strongly Tor-independent Modules over Local Rings.* Preliminary report.

Let $(R, \mathfrak{m})$ be a local ring, and let $M_1, \dots, M_n$ be finitely generated R-modules that are strongly Tor-independent, i.e., such that $\mathrm{H}_{\geq 1}(M_{i_1} \otimes^{\mathbf{L}}_R \cdots \otimes^{\mathbf{L}}_R M_{i_t}) = 0$ for all $1 \leq i_1 < \cdots < i_t \leq n$. Gerko proved that if R is artinian, then the existence of such a sequence implies that $\mathfrak{m}^n \neq 0$. (A version when R is Cohen-Macaulay follows naturally.) We use DG algebra techniques to investigate the case where R is not Cohen-Macaulay. (Received February 28, 2020)