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Katharine L.M. Adamyk* (katharine.adamyk@colorado.edu). *Localizing Ext and Lifting $\mathcal{A}(1)$ -Modules*. Preliminary report.

For any bounded below module, M , over the Steenrod algebra, \mathcal{A} , the E_2 page of the Adams Spectral Sequence localized at h_0 is determined by the Margolis homology of M . However, M need not be an \mathcal{A} -module for this E_2 term to make sense, merely an $\mathcal{A}(1)$ -module. In this talk, we will discuss a spectral sequence that can be used to compute the relevant localized Ext term where the first page is determined by the Margolis homology of M , a bounded below $\mathcal{A}(1)$ -module.

In the process of investigating this spectral sequence, we will also discuss some conditions for giving an $\mathcal{A}(1)$ -module an \mathcal{A} -module structure and the classification of $\mathcal{A}(1)$ -modules with trivial Margolis homology. (Received July 10, 2019)