1160-18-212 **Emily M Rudman*** (walthere@indiana.edu). *The cyclic homology of* $k[x_1, x_2, \ldots, x_d]/(x_1, x_2, \ldots, x_d)^2$. Preliminary report.

The Hochschild homology of the ring $k[x_1, x_2, \ldots, x_d]/(x_1, x_2, \ldots, x_d)^2$ has been known and calculated several ways. Hochschild homology of rings is of interest as the target of the Dennis trace from algebraic K-theory, which involves a circle action on Hochschild homology. In an appropriate sense, cyclic homology is the homology of the quotient by this circle action. The calculation of the cyclic homology of $k[x_1, x_2, \ldots, x_d]/(x_1, x_2, \ldots, x_d)^2$ is relatively straightforward for $k = \mathbb{Q}$, but we see interesting torsion phenomena over $k = \mathbb{Z}$. (Received August 10, 2020)