1077-55-258   **Jason B. McCarty*** (`jbm2t@virginia.edu`). *The* mod 2 *homology of infinite loopspaces.*

In a forthcoming joint paper with N. Kuhn, we describe universal differentials in a Goodwillie tower spectral sequence converging to $H_*(\Omega^\infty X)$ for connected spectra X. Using only these differentials, we construct an algebraic spectral sequence, depending functorially on $H_*(X)$ as a right module over the Steenrod algebra. We show that the E^∞ term of the algebraic spectral sequence can be described in terms of the derived functors of "destabilization," as studied by W. Singer and others. Moreover, we prove that the tower spectral sequence is a subquotient of the algebraic spectral sequence, and that the spectral sequences are identical for interesting spectra. I will discuss these results in my talk. (Received August 16, 2011)