

Questions on $THH(tm f_1(3))$

1. How does the Dyer-Lashof algebra act on $H_*(tm f_1(3))$? (Does it follow from Stienberger's calculations in the H_∞ volume?)
2. Is there a (finite) complex with the following properties :
 - (a) $tm f_1(3) \wedge X$ is computable (possibly recognizable as a known spectrum).
 - (b) $tm f_1(3) \wedge X$ is a homotopy commutative ring spectrum.
 - (c) There exists a reasonable (finite) cell complex T such that T is a ring spectrum and X is a T -module.
3. What does Galois descent for topological Hochschild homology (a la Akhil Mathew for example) have to say about $THH(tm f_1(3))$? (Question from Andrew)