$$THH_*(BP\langle n\rangle; k(1))[v_0] \longrightarrow THH_*(BP\langle n\rangle; L)$$

$\otimes v_1^{-1}$ ↓ ↓ $\otimes v_1^{-1}$

$$THH_*(BP\langle n\rangle; K(1))[v_0^{\pm}] \longrightarrow THH_*(BP\langle n\rangle; L)$$

$d_r(\lambda_1) = v_0^r x$ ↓

$d_r(x_1) = 0.$

x has to be v_1-torsion

doesn't happen by computation.

this can't happen.

$d_r(y) = v_0^r \lambda_1$ ⇒ y is v_1-torsion free

$p=3$