1125-VU-3099 **Juan S. Villeta-Garcia*** (`villeta2@illinois.edu`). *The Hungarian Horntail (THH) and Other Mathematical Beasts.* Preliminary report.

Algebraic K-Theory is often thought of as "the" universal additive invariant of rings. This magical functor has proven very difficult to compute (we don't even know it for the integers!). One crack at this golden egg has been to study its "first derivative", Topological Hochschild Homology (THH), and reconstruct invariants from it (Witt vectors, Topological Cyclic Homology, etc.). We describe a procedure, inspired by Waldhausen's additivity theorem, that recovers some of these mathematical monstrosities, and ties in to work of Lindenstrauss and McCarthy on the Taylor tower of Algebraic K-Theory. (Received September 21, 2016)