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John D. Berman* (jberman@math.utexas.edu). *THH and enriched categories.*

THH is an invariant of a category generalizing the trace of linear algebra. It is generated by symbols $\text{tr}(f)$ subject to relations $\text{tr}(fg)=\text{tr}(gf)$. Using this perspective, we will see that THH is controlled by a single universal object, a certain circle bundle over a graph (in the sense of combinatorics). Along the way, we will describe a new and hopefully intuitive model for enriched higher categories. (Received January 20, 2020)