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Michael Reeks* (mreeks@uottawa.ca) and **Christopher Leonard**. *Traces of tensor product categories.*

The trace is a decategorification functor which can often reveal additional structure not visible in the Grothendieck group. For instance, the categories of modules over the cyclotomic KLR algebra associated to a Lie algebra \mathfrak{g} of type ADE have Grothendieck groups isomorphic to highest weight integrable representations of the quantum group $U_q(\mathfrak{g})$, while their traces are isomorphic to Weyl modules over the current algebra of \mathfrak{g} . Webster introduced a generalization of cyclotomic KLR algebras called tensor product algebras. Modules over these algebras categorify tensor products of highest weight integrable modules of $U_q(\mathfrak{g})$. In this talk, we investigate the trace of Webster's tensor product categorification, and show that it is isomorphic to a tensor product of Weyl modules. (Received August 20, 2018)