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Michael Reeks* (mar055@bucknell.edu) and **Alistair Savage**. *Trace of the Frobenius Heisenberg category*.

The Heisenberg algebra plays an important role in many areas of mathematics and physics. Khovanov constructed a categorical analogue of this algebra which emphasizes its connections to representation theory and combinatorics. While the Grothendieck group of this category is the Heisenberg algebra, applying another decategorification functor called the trace to the Heisenberg category yields a richer structure: a W-algebra, an infinite-dimensional Lie algebra related to conformal field theory. In this talk, we will describe recent work extending this latter result to a generalized version of the Heisenberg category associated to an arbitrary graded Frobenius algebra F . We describe a basis of the trace of this Frobenius Heisenberg category and discuss progress towards computing its algebra structure. (Received January 20, 2020)