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Michael Reeks* (mar3nf@virginia.edu) and **Can Oguz**. *Trace of the twisted Heisenberg algebra.*

Categorification is a process by which structures can be lifted to higher categorical levels, often revealing new information. The original structure can be recovered through an inverse process, decategorification. Decategorification is typically accomplished by taking the Grothendieck group. Several recent works have shown that an alternative decategorification functor, the trace (or zeroth Hochschild homology), can reveal additional rich algebraic structures. In this talk, we shall describe the trace of a categorification of the twisted Heisenberg algebra and connect it to a certain infinite dimensional Lie algebra known as a W-algebra. (Received February 05, 2017)