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J. Elisenda Grigsby* (grigsbyj@bc.edu), 301 Carney Hall, Boston College, Chestnut Hill, MA 02467, and **Stephan M. Wehrli**. *On Khovanov homology and Heegaard Floer homology*.

I will discuss an algebraic relationship between the Khovanov homology of certain tangles in product sutured manifolds and the Heegaard Floer homology of their sutured double-branched covers. This relationship implies that Khovanov's categorification of the reduced n -colored Jones polynomial detects the unknot whenever $n > 1$.

Furthermore, certain TQFT operations (e.g., cutting and stacking) on the tangles correspond naturally to geometric operations (e.g., generalized plumbing) on the sutured double-branched covers, and the algebraic connection between Khovanov and Heegaard-Floer homology behaves naturally with respect to these operations.

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