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J. Elisenda Grigsby* (grigsbyj@bc.edu), 301 Carney Hall, Chestnut Hill, MA 02467, and
Denis Auroux and **Stephan M. Wehrli**. *On Khovanov-Seidel quiver algebras and bordered Floer homology.*

The low-dimensional topology community has been energized in recent years by the introduction of a wealth of so-called “categorified” invariants. One obtains such invariants from two apparently unrelated points of view: 1) algebraically, via the higher representation theory of quantum groups, and 2) geometrically, via symplectic geometry and gauge theory. Although the invariants themselves share a number of formal properties, finding explicit connections between the two viewpoints has proven challenging.

In this talk, I will discuss a relationship between Khovanov-type (algebraic) and Heegaard-Floer-type (geometric) invariants of braids. Specifically, I will describe how the bordered Floer bimodule associated to the double-branched cover of a braid is related to a similar bimodule arising in work of Khovanov and Seidel. (Received June 24, 2011)