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Denis Auroux, John A. Baldwin and **J. Elisenda Grigsby*** (grigsbyj@bc.edu), Boston College, Department of Mathematics, 301 Carney Hall, Chestnut Hill, MA 02467, and **Stephan M. Wehrli**. *Categorified invariants and braid conjugacy*.

An "old" construction of Khovanov-Seidel associates to every braid a (homotopy equivalence class of) dg bimodules over an algebra. Their braid invariant is "faithful"—i.e., agrees on two braids iff the braids are the same. In this talk, I will describe a relationship between the Khovanov-Seidel braid invariant and the "sutured annular Khovanov homology" of the braid closure in the solid torus. I will also mention what this and some other categorified invariants can and cannot tell us about braid conjugacy classes. Parts of this talk describe joint work with D. Auroux and S. Wehrli, and other parts describe joint work with J. Baldwin. (Received September 24, 2012)