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Melissa Zhang* (melissa.zhang@uga.edu). *Plamenevskaya's invariant, braids, and stability.*

Given a braid closure representative $\hat{\beta}$ of a transverse knot, Plamenevskaya's invariant picks out a class ψ in the Khovanov homology of the (smooth) knot $\hat{\beta}$. It is still open whether ψ is effective (i.e. distinguishes better than self-linking number), but its construction has nevertheless provided the basis for many interesting constructions. In this talk, I describe two structural (algebraic) phenomena in Khovanov homology that play well with Plamenevskaya's construction: (1) canonical generators in Khovanov-Robert's $U(1) \times U(1)$ equivariant link homology and (2) Rozansky's discovery that the Khovanov homology for torus braids stabilizes for each quantum grading. This talk is partially based on ongoing joint work with Carmen Caprau, Christine Ruey Shan Lee, Nicolle González, and Radmila Sazdanović. (Received September 21, 2021)