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Title: Khovanov homology via categorified quantum groups

Abstract: In 2004, Bar-Natan reformulated Khovanov's homology theory for links in the 3-sphere in terms of a quotient of the (2-)category of planar tangles and cobordisms. We'll review this construction and discuss work of the author (joint with Aaron Lauda and Hoel Queffelec) showing how it can be derived from the Khovanov-Lauda categorification of quantum sl_m via an instance of categorical skew-Howe duality. Time permitting, we'll also discuss work in progress (joint with Queffelec) extending this result to give a completely combinatorial formulation of Khovanov-Rozansky homology.