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Radmila Sazdanovic* (rsazdan@ncsu.edu), Department of Mathematics NCSU, Box 8205, Raleigh, NC 27695, and **Mikhail Khovanov**. *Diagrammatic categorification of the Chebyshev polynomials*. Preliminary report.

Representations of $sl(2)$ provide a categorification of the Chebyshev polynomials of the second kind with the irreducible $(n+1)$ -dimensional representation corresponding to the n -th Chebyshev polynomial. We describe a novel categorification of the Chebyshev polynomials based on a diagrammatic non-commutative idempotent algebra. (Received September 17, 2016)