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Radmila Sazdanovic* (rsazdan@ncsu.edu), Department of Mathematics NC State University, Raleigh, NC 27695-8205, and **Mikhail Khovanov**. *A categorification of the polynomial ring $\mathbb{Z}[x]$* . Preliminary report.

We introduce a categorification of the one-variable polynomial ring $\mathbb{Z}[x]$, based on the geometrically defined graded algebra. This construction is generalized to the categorification of some basic special functions. (Received September 04, 2018)