Radmila Sazdanovic* (rsazdanovic@math.ncsu.edu), NCSU Department of Mathematics, 3120 SAS Hall 2311 Stinson Drive, PO Box 8205, Raleigh, NC 27695, and Mikhail Khovanov. A categorification of the polynomial ring.

We introduce a categorification of the one-variable polynomial ring Z[x], based on the geometrically defined graded algebra. This construction is generalized to the categorification of some basic special functions. (Received January 15, 2015)