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**Robert Laugwitz\*** ([robert.laugwitz@rutgers.edu](mailto:robert.laugwitz@rutgers.edu)) and **You Qi**. *Categorification of cyclotomic rings at non-prime roots of unity*. Preliminary report.

M. Khovanov categorified the cyclotomic ring  $O_n$  for a prime  $n = p$  using the stable category of a truncated polynomial Hopf algebra. This work is closely related to the theory of  $p$ -complexes, that is, vector spaces with a differential that does not square to zero, but its  $p$ -th power is zero. Using algebras with such differentials, the quantum group at prime roots of unity has been categorified by Khovanov–Qi, Elias–Qi. In this talk, a construction of a triangulated monoidal category categorifying cyclotomic integers that does not require the restriction of  $n$  being a prime is discussed. (Received February 13, 2018)