

1037-57-227

Carmen L Caprau* (ccaprau@csufresno.edu), Department of Mathematics, 5245 North
Backer Avenue M/S PB108, Fresno, CA 93740-8001. *On the Khovanov-Rozansky cohomology.*

For each positive integer n , Khovanov and Rozansky constructed a bigraded cohomology theory for links which categorifies the quantum $\mathfrak{sl}(n)$ polynomial, using the theory of matrix factorizations with potential x^{n+1} . We generalize their construction for $n = 2$ case, by considering a homogeneous potential that depends on two parameters. (Received February 03, 2008)