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Hao Wu* (wu@math.umass.edu), Department of Mathematics and Statistics, Lederle Graduate Research Tower, University of Massachusetts, Amherst, MA 01003. *Transversal knots and Khovanov-Rozansky cohomology.*

I will use the Khovanov-Rozansky knot cohomology theory to establish a new bound for the self-linking number of a transversal knot in standard contact \mathbb{R}^3 , which is sharper than the well known bound given by the HOMFLY polynomial. I will also introduce a sequence of transversal knot invariants, and discuss some of their properties. (Received February 21, 2006)