ROBB TODD, University of Iowa

Khovanov Homology and the Twist Number of Alternatinng Knots

O. Dasbach and X. S. Lin showed that the sum of the absolute value of the second and penultimate coefficient of the Jones polynomial of an alternating knot is equal to the twist number of the knot. Here we give a new proof of their result using a variant of Khovanov's homology that was defined by O. Viro for the Kauffman bracket. The proof is by induction on the number of crossings using the long exact sequence in Khovanov homology corresponding to the Kauffman bracket skein relation.