1023-57-1561 **Daniel S. Silver** (silver@jaguar1.usouthal.edu), Department of Mathematics and Statistics, Mobile, AL 36688, and **Susan G. Williams*** (swilliam@jaguar1.usouthal.edu), Dept. of Mathematics and Statistics, Mobile, AL 36688. *Mahler measures of twisted Alexander polynomials.*

The Mahler measure of a 1-variable polynomial is the absolute value of the leading coefficient times the product of the moduli of the roots that lie outside the unit circle. Twisted Alexander polynomials of knots were introduced by X.-S. Lin and generalized by P. Kirk and C. Livingston.

The authors have shown (extending results of R. Riley, and F. Gonzalez-Acuña and H. Short) that the Mahler measure of the Alexander polynomial of a knot is the exponential growth rate of the order of homology torsion of cyclic covers. We generalize this result for twisted Alexander polynomials using ideas from algebraic dynamics. (Received September 26, 2006)