1014-57-1239 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 Alexander polynomials of alternating links*.

We will survey results on Mahler measures of Alexander polynomials of alternating links. We know of no alternating knots for which these Mahler measures lie between 1 and 1.1618..., a value arises as a limit from a sequence of alternating pretzel knots. In joint work with A. Stoimenow we showed that for any set of alternating links with bounded twist number, there is a bound on the product of the moduli of the roots of the 1-variable Alexander polynomial outside the unit circle (the "euclidean Mahler measure"). This result fails for non-alternating links. (Received September 27, 2005)