Meeting: 1003, Atlanta, Georgia, SS 9A, AMS-MAA-SIAM Special Session on Research in Mathematics by Undergraduates, I

1003-11-963 **Lori A. McDonnell*** (minnow720@hotmail.com), Department of Mathematics, The University of Akron, Akron, OH 44325. *Roots and matrix representations of generalized Fibonacci polynomials.* Preliminary report.

A two parameter family of polynomials was introduced by Price to determine the product of chord lengths of an ellipse. These polynomials and their derivatives can be used to generate generalized Lucas and Fibonacci numbers respectively. In this talk I will show how we can find the roots and present some properties of a matrix representation of these polynomials. (Received October 01, 2004)