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**Robert Molina** and **Aklilu Zeleke\*** (zeleke@msu.edu), E-194A Holmes Hall, Lyman Briggs College and, Department of Statistics & Probability, East Lansing, MI 48825. *On the Convergence of Maximum Roots of a Fibonacci Type Polynomial Sequence.*

For a positive integer  $k$ , consider a Fibonacci type polynomial sequence given by  $G_0(x) = -1, G_1(x) = x - 1$  and  $G_n^k(x) = x^k G_{n-1}(x) + G_{n-2}(x)$ ,  $n \geq 2$ . Let  $g_n^k$  be the maximum root of  $G_n^k$  and  $\alpha_k$  be the (maximum)root of  $P_k(x) = x^k - x^{k-1} + x - 2$ . We will show that  $g_{2n}^k$  converges monotonically to  $\alpha_k$  from above and  $g_{2n+1}^k$  converges monotonically to  $\alpha_k$  from below. (Received September 22, 2009)