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Khang D Tran* (khangt@csufresno.edu), Khang Tran, 5245 North Backer Avenue M/S PB108 Fresno, California State University, Fresno, Fresno, CA 93740, and **Tamas Forgacs**. *Zeros of polynomials generated by rational functions with a hyperbolic polynomial type denominator.*

This talk investigates the location of the zeros of a sequence of polynomials generated by a rational function with a denominator of the form $G(z, t) = P(t) + zt^r$, where the zeros of P are positive and real. We show that every member of a family of such generating functions - parametrized by the degree of P and r - gives rise to a sequence of polynomials $\{H_m(z)\}_{m=0}^{\infty}$ that is eventually hyperbolic. Moreover, when $P(0) > 0$ the real zeros of the polynomials $H_m(z)$ form a dense subset of an interval $I \subset \mathbb{R}^+$, whose length depends on the particular values of the parameters in the generating function (Received September 18, 2016)