1145-30-1022 Khang D Tran\* (khangt@mail.fresnostate.edu), Department of mathematics, 5245 North Backer Avenue M/S PB108, Fresno, CA 93740, and Andres Zumba. Zeros of polynomials with four-term recurrence and linear coefficients.

This talk studies the zero distribution of a sequence of polynomials  $\{P_m(z)\}_{m=0}^{\infty}$  generated by the reciprocal of  $1 + ct + B(z)t^2 + A(z)t^3$  where  $c \in \mathbb{R}$  and A(z), B(z) are real linear polynomials. We find necessary and sufficient conditions for the reality of the zeros of  $P_m(z)$ . Under these conditions, we find an explicit interval containing these zeros, whose union forms a dense subset of this interval. (Received September 18, 2018)