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 $\left\{P_{m}(z)\right\}_{m=0}^{\infty}$ generated by the reciprocal of $1+c t+$ $B(z) t^{2}+A(z) t^{3}$ 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)

