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Khang D Tran* (khangt@mail.fresnostate.edu), Department of Mathematics, 5245 North Backer Avenue M/S PB108, Fresno, 93740, and **Maverick Zhang**. *Linear combinations of polynomials with three-term recurrence.*

We study the zero distribution of the sum of the first n polynomials satisfying a three-term recurrence whose coefficients are linear polynomials. We also extend this sum to a linear combination, whose coefficients are powers of $az + b$ for $a, b \in \mathbb{R}$, of Chebyshev polynomials. In particular, we find necessary and sufficient conditions on a, b such that this linear combination is hyperbolic. (Received September 12, 2019)