

Exploring a Vietoris-Related Appell Sequence

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In this talk, we study an Appell sequence of real polynomials whose coefficients are related to a number sequence that first appeared in a result by Vietoris, with particular emphasis on the location and distribution of their zeros. Two complementary approaches are considered: a combinatorial approach, based on the structure of the coefficients, and an analytical approach, which exploits a connection with Jacobi polynomials. Some of the main properties obtained from these two perspectives will be presented.