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NOTES ON SOME BOUNDS FOR THE ZEROS OF POLYNOMIALS

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Abstract. We apply some spectral radius and norm inequalities to the Frobenius companion matrix to present a simple proof of Kuniyeda's bound for the zeros of polynomials. We then use Kuniyeda's bound to derive a new bound for the zeros of polynomials. A partial comparison between the two bounds is given. Our new bound generalizes and refines classical bounds due to Guggenheimer and Walsh.

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