On Trigonometric Polynomials Deviated Least from Zero on an Interval

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Extremal trigonometric polynomials with two fixed leading coefficients deviated least from zero on an interval shorter than period are found. The complete solution splits into three different cases, one of them uses elliptic functions, and two others use only elementary functions. (Published in Journal of Approximation Theory, Volume 168, April 2013, Pages 18-32). Weighted analogues (rational trigonometric functions) are considered also.

(Results are joint with S.V. Tyshkevich).