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BEST EXPONENTS IN MARKOV'S INEQUALITIES

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Abstract. By means of weakly equilibrium Cantor-type sets, solutions of two problems related to polynomial inequalities are presented: the problem by M. Baran et al. about a compact set $K \subset \mathbb{C}$ such that the Markov inequality is not valid on K with the best Markov's exponent, and the problem by L. Frerick et al. concerning compact sets satisfying the local form of Markov's inequality with a given exponent, but not satisfying the global version of Markov's inequality with the same parameter.

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