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Recent progress related to the Krzyż conjecture

Let f be an analytic function from the unit disk into the unit disk, which is non-vanishing. Expanding in Taylor series about the origin, $f(z) = \sum_{n=0}^{\infty} a_n z^n$. Krzyż conjectured in the 1960s that for any fixed $n \geq 1$, the supremum of $|a_n|$ in this class of functions is precisely $\frac{2}{e}$ (independent of n!!) and that the supremum would only be attained for a certain function (up to normalizations). The conjecture has been proved for $1 \leq n \leq 7$ ($n = 6, 7$ have been recent proofs, AI assisted), but there have been several other recent advances. I will explain some of these advances: some are by other authors, some are joint work with Eiframidis, Llinares, MacDonald and Vukotic, some joint with Eiframidis, Llinares, Martin, Sawyer and Vukotic, and some are solo work by my student MacDonald.