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A Tauberian application of the asymmetric Beurling-Selberg problem

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The original (symmetric) Beurling-Selberg problem searches, given a locally integrable function f on $\mathbb{R}$, for the function G of exponential type 2π that minimizes the quantity $\int_{-\infty}^{\infty} |f(x)-G(x)|\mathrm{d}x$. The relevance of this approximation problem lies in the fact that functions of exponential type have a compactly supported Fourier transform which can be very helpful in some instances. We shall introduce an asymmetric version of this problem and discuss several applications, particularly in Tauberian theory.