Sharp embeddings between Paley-Wiener spaces

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This will be a talk touching on a few themes within analysis and differential equations. We will address the problem of estimating the operator norm of certain embeddings between spaces of entire functions (called Paley-Wiener spaces). The quest for such operator norms can be equivalently thought as a Fourier uncertainty principle for bandlimited functions. We discuss precise asymptotics in general, and identify sharp constants in certain particular cases via techniques from reproducing kernel Hilbert spaces. Applications to sharp higher order Poincaré inequalities and other related extremal problems will be discussed. The talk will be accessible to a broad audience in analysis.

More information at: https://mat.uab.cat/web/seminarianalisi/