Characterization of stability of contractions

A. Szalai

We characterize those sequences $\{h_n\}_{n=1}^{\infty}$ of bounded analytic functions, which have the property that an absolutely continuous contraction T is stable (that is the powers T^n converge to zero) exactly when the operators $h_n(T)$ converge to zero in the strong operator topology. Our result is extended to polynomially bounded operators too.

The talk is based on a joint work with L. Kérchy.