

Analysis Seminar Thursday April 23

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Title: Constrained interpolation in Bergman spaces

Abstract: Given a zero set W for the Bergman space A^p on the unit disk, I consider the problem of identifying the interpolation sequences for the space of functions in A^p that vanish on W . Part of the problem is determining exactly what that should mean. That is, given a sequence $\{z_n\}$ and a function $f \in A^p$ that vanishes on W , what is the "natural" Banach sequence space X that one would expect to contain the sequence of values $(f(z_n))$. I will make what seems to be the "right" choice of X , and then characterize those $\{z_n\}$ such that to every $(c_n) \in X$ there exists $f \in A^p$ with $f(z_n) = c_n$ for all n .