Mathematics, Statistics, and Computer Science **@ UIC**

Complex Analysis Seminar

The 1-dimensional extension property in complex analysis

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Abstract: A classical theorem states that if a function on the unit circle has vanishing negative Fourier coefficients, then it extends to holomorphic function on the unit disc. What happens when you are given a family of curves, and a function which extends holomorphically from each of the curves? This area of study is called the ''1-dimensional extension problem''. Results for planar domains, and for holomorphic extension from boundaries in C^n will be discussed. One application is the construction of a completely new class of algebras of real analytic functions. Various techniques of analytic extension in several variables are used to prove these results.

Wednesday, November 22 at 3:00 PM in SEO 1227