Analysis Seminar

Title: F-differentiable functions and F-quasianalyticity

Speaker: S. Morley (Nottingham)

Date: Tue 23rd February 2016 at 4:00PM

Location:

Abstract: Let X be a perfect, compact subset of the complex plane. We usually study those continuous, complex-valued functions f on X such that f has a continuous derivative at all points of X. Unfortunately,the collection of all such functions on X does not have desirable properties as a normed algebra of functions. In 2003, Bland and Feinstein introduced larger collections of continuous functions on X which have much more desirable properties as normed algebras.They studied those continuous functions on X for which there is anassociated continuous function on X which 'integrates correctly' along each path in a given collection F of rectifiable paths in X.We call these functions F-differentiable functions and they have similar properties to the continuous differentiable functions on X. In this talk, we discuss the algebras of F-differentiable functions, their properties, and a notion of quasianalyticity fort hese algebras.