Colloquium del Departamento de Análisis Matemático

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"The structure of extended normed linear spaces"

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a las 13:00 horas en el seminario 222

Abstract:

By an extended (real) normed linear space, we mean a vector space equipped with a norm that can take on the value infinity as well as nonnegative real values. Points of departure for this study are the extended supremum norm for the continuous real functions defined on a metric space, and the stronger so-called Lipschitz norm defined on the same space, which presents an appropriate context to appreciate the classical theorem on the interchange between limit and derivative in single-variable calculus, and whose dual space contains an isometric copy of the metric space. We survey the structure of extended normed spaces, with an emphasis on the separation of convex sets.

(In part joint work with Mike Hoffman and separately with Jon Vanderwerff).

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