



# Colloquium del Departamento de Análisis Matemático

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**“The Dvoretzky-Rogers Theorem for spaces  
of vector measure integrable functions”**

**Jueves, 13 de Marzo de 2014  
a las 13:00 horas en el Seminario 222.**

**Abstract:**

We show an extension for Banach function spaces of the Dvoretzky-Rogers Theorem when the usual scalar duality is substituted by the vector valued duality given by a vector measure. The topology of pointwise convergence of the integrals in spaces of  $p$ -integrable functions with respect to a vector measure is considered. We analyze some properties of the  $(q, P_m)$ -summing operators that send sequences that are pointwise summable to norm summable sequences. Our main result shows that some topological requirements are necessary to characterize when the identity map being  $(q, P_m)$ -summing in a subspace is equivalent to the subspace to be finite dimensional.

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