SEMINARIO

Análisis funcional no-lineal y geométrico

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**"A geometric characterization
of planar BV extension domains"**

**Miércoles, 26 de enero de 2011
a las 13:00h en el Seminario 222**

Abstract. The theory of functions of bounded variation (BV) was created by De Giorgi, Stampacchia, and Miranda to consider problems related to minimal surfaces and the Plateau problem. In this talk we will consider Euclidean domains for which BV functions on the domain extend to the entire Euclidean space as a BV function with BV norm majorized by the BV norm on the domain. Burago and Mazya gave a characterization of such domains in terms of extending sets of finite perimeter; this condition is almost as difficult as the original BV extension condition to verify. In the setting of planar domains we will give a simpler, more easily verifiable, condition that characterizes BV extension property. This talk is based on a joint work with Michele Miranda Jr. and Pekka Koskela.

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