



Mês de: **NOVEMBRO 2012**

SEMINÁRIO DE ANÁLISE E EQUAÇÕES DIFERENCIAIS

Dia 8 de Novembro (quinta-feira), às 13h15, na Sala B3-01

On elliptic and parabolic Monge-Ampère equations giving rise to a free boundary

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Abstract:

We shall prove several qualitative properties of solutions of some stationary and parabolic equations associated to the Monge–Ampère operator. Mainly, we focus our attention in the occurrence of a free boundary (separating the region where the solution u is locally a hyperplane, and so were the Hessian D^2u is vanishing, from the rest of the domain). In particular, our results (obtained in collaboration with Gregorio Díaz) apply to suitable formulations of the Gauss curvature flow and of the "worn stones" problems intensively studied in the literature.

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