

Mês de: ABRIL 2015

**SEMINÁRIO DE ANÁLISE E EQUAÇÕES
DIFERENCIAIS**

Dia 09 de Abril (quinta-feira), às 13:30h, na Sala B3-01

**On the Existence of a Solution of a Class of
Non-Stationary Free Boundary Problems**

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Abstract:

We establish existence of a solution for a class of parabolic free boundary problems including the evolutionary dam problem. We use a regularized problem for which we prove existence of a solution by applying the Tychonoff fixed point theorem. Then we pass to the limit to get a solution of our problem. We also give a regularity result of the solutions.

Keywords: Free boundary problems, existence, regularity.

