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SEMINÁRIO DE ANÁLISE E EQUAÇÕES DIFERENCIAIS

Dia 29 de Setembro (quinta-feira), às 13h30, na sala 6.2.33

Dirichlet and Neumann problems for parabolic non-divergence equations with main coefficients measurable in time

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Abstract:

We consider the Dirichlet problem for non-divergence parabolic equation with discontinuous in t coefficients in a half-space and in a wedge. The main result is weighted coercive estimates of solutions in anisotropic Sobolev spaces. We give an application of these results to linear and quasi-linear parabolic equations in a bounded domain. Here we consider the case of $C^{1,\delta}$ -boundary, $\delta \in [0, 1]$, as well as the case of domain with an edge or with a conical point.

Similar results are obtained for the oblique derivative problem.

The talk is based on joint papers with Vladimir Kozlov [1-4].

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