

Mês de: NOVEMBRO 2014

**SEMINÁRIO DE ANÁLISE E EQUAÇÕES
DIFERENCIAIS**

Dia 27 de Novembro (quinta-feira), às 13:30h, na Sala B3-01

On the Mathematical Analysis of Thick Fluids

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Abstract:

In chemical engineering models, shear-thickening or dilatant fluids may converge to the limit class of incompressible fluids with a maximum admissible shear rate, the so-called thick fluids. These non-Newtonian fluids may be obtained, in particular, as the power limit of Ostwald-deWaele fluids, and may be formulated as a new class of evolution variational inequalities. We discuss the existence, uniqueness and continuous dependence of solutions, as well as the asymptotic stabilization in time towards steady state solutions.

