
*Workshop dedicated to the memory of Professor Gabriela Kohr
(3rd edition)*

Geometric Function Theory in Several Complex Variables and Complex Banach Spaces

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Localization of energies in Navier-Stokes models

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Abstract

We analyze a general class of coupled systems of Navier-Stokes type equations with variable coefficients and non-homogeneous terms of reaction type in the incompressible case. Existence of solutions satisfying the homogeneous Dirichlet condition in a bounded domain in \mathbb{R}^n , $n \leq 3$, and localization results of energies are obtained by using a variational approach and the fixed point index theory. Joint work with Mirela Kohr.