
Seminário Luiz Adauto Medeiros de Análise e EDP

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IM-UFRJ, CT sala C-116

A brief study of the Navier-Stokes equations in critical homogeneous (Fourier-)Besov spaces

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Resumo: In this talk we recall some previous results on the existence of global solutions of the d -dimensional incompressible Navier-Stokes system, for small initial data in critical homogeneous (Fourier-)Besov spaces $\dot{B}_{p,q}^s(\mathbb{R}^d)$ ($\mathcal{F}\dot{B}_{p,q}^s(\mathbb{R}^d)$). Moreover, it will be established a new related result on global well-posedness in the context of critical homogeneous (Fourier-)Besov mixed-Lebesgue spaces $\dot{B}_{\vec{p},q}^s(\mathbb{R}^d)$ ($\mathcal{F}\dot{B}_{\vec{p},q}^s(\mathbb{R}^d)$), for suitable values on $s, \vec{p}$ and q . This is a joint work with Prof. Wladimir Neves (IM-UFRJ) and was supported by FAPERJ (Grants 200.140/200.141/2024).



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