

# Seminário de sistemas dinâmicos e estocásticos

Departamento de Matemática - IMECC - UNICAMP

## Strong-Trajectorial approximation 2D-Navier Stokes by stochastic particle systems with moderate interaction

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### Resumo:

We consider an interacting particle system modeled as a system of  $N$  stochastic differential equations driven by Brownian motions with moderate interaction. We prove that the empirical process (mollifiers) converges, uniformly in the space variable, to the solution of the 2D-Navier Stokes Equation written in vorticity. We justify the convergence of the numerical method proposed by Chroin for the case the particle systems with moderate interactions. Joint work with Marielle Simon from Inria, Univ. Lille.

**Data:** 23 de agosto de 2019 - 11:00.

**Local:** Sala 121 do IMECC.

Consulte a programação em [[www.ime.unicamp.br/ssde](http://www.ime.unicamp.br/ssde)]