

# Seminário de sistemas dinâmicos e estocásticos

IMECC - UNICAMP

## Regularization by transport noise for the vorticity form of 3D Navier-Stokes equations

Dejun Luo

(Chinese Academy of Sciences)

### Resumo:

We consider the problem of regularization by noise for the vorticity form of 3D Navier-Stokes equations. As opposed to several attempts made with additive noise which remained inconclusive, we show here that a suitable multiplicative noise of transport type has a regularizing effect. It is proven that stochastic transport noise provides a bound on vorticity which gives well posedness, with high probability. The result holds for sufficiently large noise intensity and sufficiently high spectrum of the noise. This is based on a joint work with Professor Franco Flandoli.

Via Zoom - link a ser anunciado dia 24/09.

**Data:** 25 de setembro de 2020 - 11:00.

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