Seminário de sistemas dinâmicos e estocásticos

IMECC - UNICAMP

Delayed blow-up by transport noise

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<u>Resumo:</u>

Many PDEs display a dichotomy behaviour between global wellposedness in thesmall and finite time blow up for large initial data; here we investigate how such solution theory is affected by an incompressible transport type of noise, which models the presence of a turbulent fluid. Such noise can be shown to delay or prevent formation of singularities with high probability; the proof is based on relating the so found SPDE to a version of the original PDE with "enhanced dissipation", by means of a suitable scaling limit. Time permitting I will also present some upcoming results on quantitative estimates for such scaling limits. Based on joint works with F. Flandoli and D. Luo.

Data: 19/03/2021 - 11:00 (GMT-3) - Via Zoom - Meeting ID: 921 8422 0254 - Passcode: 269378

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