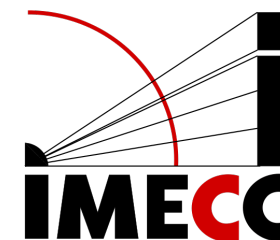




V Workshop in Stochastic Analysis and Applications

IMECC - Unicamp

July 31st to August 2nd, 2024



David Mollinedo
UFTPR

On local well-posedness of the stochastic incompressible density-dependent Euler equations

Abstract

In this paper we study the stochastic inhomogeneous incompressible Euler equations in the whole space \mathbb{R}^3 . We show the existence and pathwise uniqueness of local solutions with a multiplicative stochastic noise. Our approach is based on reducing our problem to the random problem and some estimations for type transport equations.