

Regularity criteria for the 3d magnetic Bénard equations without thermal diffusion in terms of pressure

Dongxiang Chen¹, Fangfang Jian¹, and Xiaoli Chen¹

¹Jiangxi Normal University

June 20, 2020

Abstract

In this paper, the authors obtain some new blow up criteria for the smooth solution to the three dimensional magnetic Bénard equation without thermal diffusion in terms of pressure. We prove that if $\|\pi\|_{L^2(0, T; L^{\{f_3r\}}(\mathbb{R}^3))} \leq 0$

Hosted file

Regularity criteria of 3D magnetic Benard equation-MNSA.pdf available at <https://authorea.com/users/335306/articles/461144-regularity-criteria-for-the-3d-magnetic-b-enard-equations-without-thermal-diffusion-in-terms-of-pressure>