Ann. Sc. Norm. Super. Pisa Cl. Sci. (5)
Vol. XVI (2016), 291-333

Almost-periodic solutions to an initial boundary value problem for model equations of resistive drift wave turbulence

SHINTARO KONDO AND ATUSI TANI

Abstract. In this paper we are concerned with the drift wave turbulence in a strong magnetic field. The existence and the uniqueness of a strong Stepanov-almost-periodic solution to the initial boundary value problems are established both for the model equations of the resistive drift wave turbulence and for the three-dimensional Hasegawa–Wakatani equations when the initial data are Stepanov-almost-periodic in the magnetic field direction.

Mathematics Subject Classification (2010): 35Q60 (primary); 35K45, 42A75, 42B05, 82D10 (secondary).