LONG TIME BEHAVIOR OF A TWO FLUID MODEL

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Abstract. We consider a two fluid model which describes the motion of two charged particles in a strict neutral incompressible plasma. In this paper we mainly study the stability of the solution around zero given that the initial data is small and has sufficient regularity. In this paper we show that our system is a system of regularity-loss and the $L^2$ norm of lower derivatives of the solution decays with a rate.

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