Ann. Sc. Norm. Super. Pisa Cl. Sci. (5) Vol. XIV (2015), 1-36

Global smooth solution of the Cauchy problem for a model of radiative flow

BERNARD DUCOMET AND ŠÁRKA NEČASOVÁ

Abstract. We consider a simplified model of compressible Navier-Stokes-Fourier system coupled to radiation. We prove existence and uniqueness of the solution for smooth data near a radiative equilibrium.

Mathematics Subject Classification (2010): 35Q30 (primary); 76N10 (secondary).