

On the temporally global problem of the generalized Burgers' equation

By

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E. Hopf discussed in details on "Burgers' equation" in his famous paper [5]. Since then, a great many papers on this equation and its related topics have appeared. The present author, however, thinks that there lies a very deep gap between the above equation and the system of equations for compressible viscous fluids. This paper aims at taking a step towards the latter, especially, from the view-point of treating temporally global problems.

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§1. Introduction and Notations.

We have shown in [7], [8] the existence of a temporally local solution of the system of fundamental equations for compressible viscous