

1054-35-254

**Juhi Jang\***, Courant Institute, 251 Mercer Street, New York, NY 10012, and **Nader Masmoudi**. *Vacuum in Gas and Fluid Dynamics*.

The study of vacuum is important in understanding the motion of gaseous stars or shallow water. We propose some interesting problems described by compressible Euler equations with vacuum and present the rigorous framework on how to study, in particular, in one space dimension. (Received September 15, 2009)