偏微分方程及其应用中心

学术报告

报告题目： Well-posedness of small BV solutions to isentropic Euler from Navier-Stokes

报 告 人： Prof. Moon-Jin Kang, KAIST, Korea

时 间： 2024 年 3 月 6 日（星期三）15:00-16:00

地 点： 思源楼 S515

摘 要： The Cauchy problem for compressible Euler system from inviscid limit of Navier-Stokes remains completely open, as a challenging issue in fluid dynamics.

In this talk, I will give a first resolution for this problem in the 1D isentropic case. We will show the global well-posedness of entropy solutions with small BV initial data in the class of inviscid limits from the associate Navier-Stokes. The proof is based on the three main methodologies: the modified front tracking algorithm; the a-contraction with shifts; the method of compensated compactness. This is a joint work with Geng Chen (U. Kansas) and Alexis Vasseur (UT-Austin).