西北大学
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The large-time behavior of solutions to the Euler equations with time-dependent damping

报告人：崔海波 副教授（华侨大学）

报告时间：2021 年 6 月 24 日上午 09:00-10:00

地点：线上线下同步(东学楼 0227)　(腾讯会议 ID: 900 280 134)

链接：https://meeting.tencent.com/s/zpKBa6l8tTKQ

报告摘要：In this talk, we are concerned with the large-time behavior of L^\infty weak entropy solutions for the compressible Euler equations with time-dependent damping and vacuum for any large initial data. We obtain that the density converges to the Barenblatt solution of a well-known porous medium equation with the same finite initial mass in L^1 decay rate. For the Cauchy problem without vacuum.We rigorously prove that the solutions time-asymptotically converge to diffusion wave whose profile is self-similar solution to the corresponding parabolic equation, which justifies Darcy's law.

报告人简介：

崔海波，博士，华侨大学数学科学学院副教授，硕士生导师。主要从事非线性偏微分方程及其相关领域的研究，在偏微分方程重要学术刊物 SIAM Journal on Mathematical Analysis，Journal of Differential Equations、SCIENCE CHINA Mathematics 等发表 SCI 论文。先后主持国家自然科学基金青年项目和面上项目。

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2021 年 6 月 22 日