Hypersonic limit of compressible Euler flows and Radon measure solutions of conservation laws

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链接入会： https://meeting.tencent.com/s/B2hQbLMHFLrT

报告摘要： In this talk, we will review some physical backgrounds of Hypersonic limit flows in Aerodynamics and the exploration of related mathematical theory, which may be related to the Radon measure solution of conservation laws. After that, we introduce some recent research on it, including the definition of the solution, the piston problem and the steady flow passing two and three-dimensional bodies respectively. Solution with concentration supported on surfaces is involved. The difference of it with that on line and on a point will be seen clearly. This talk is based on joint works with Prof. Hairong Yuan, Dr. Qin Zhao and Yunjuan Jin.

报告人简介：

　　屈爱芳，教授、博导，主要从事非线性双曲守恒律方程的理论研究，兴趣包括非线性波的结构及性质，守恒律方程解的正则性等。最近几年关注高超音流的数学理论，对 Euler 方程组初值及初边值问题的 Radon 测度解理论进行了研究，给出了物理和工程应用中的牛顿-布斯曼公式等的严格数学证明。主要结果发表在 Arch. Ration. Mech. Anal., SIAM J. Math. Anal., J. Differential Equations 等期刊上，主持过国家自然科学基金面上、青年、天元项目。

　　欢迎各位老师和同学参加！

西北大学数学学院

2020 年 12 月 11 日