报告题目：Concentration phenomenon of weak solutions for compressible isentropic Navier-Stokes equations in dimensions three

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摘要： We will discuss the concentration phenomenon of weak solutions for isentropic compressible Navier-Stokes equations. Except a closed set S^c with zero parabolic Hausdorff measure, $P^{\gamma(3)}(S^c)=0$, the weak limit (ρ,u) of approximate solutions is a renormalized weak solution with finite energy of three dimensional compressible Navier-Stokes equations for $\gamma\in (6/5, 3/2]$ as constructed by Lions and Feireisl et al in the Leray sense. The key novelty is the improved integrability of pressure by localization, which is based on the faster decay of the gradient of velocity and the higher integrability of the Riesz potentials of both density and momentum.

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