## Maximal dissipative measure-valued solutions and oscillatory approximations for the Euler system

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In this talk we discuss the selection criterion for the measure-valued solution of the Euler system.

The measure-valued solution can be obtained as a limit of consistent and stable numerical approximations. However, for a given initial data it still maybe not unique. We show that a measure-valued solution satisfying the maximal dissipation criterion of Dafermos is necessarily a weak solution, i.e., the underlying Young measure is a Dirac measure. However, the limit of the oscillatory sequence given by the numerical scheme is not a weak solution. This implies that the numerical solutions do not comply with the admissible solution in the sense of Dafermos. Furthermore, we consider a functional optimization to construct the semigroup selection. We obtain multiple measure-valued solutions through different numerical schemes and then select them based on the entropy production and energy defects selection criteria.

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