High and Low-Mach Number Regimes for Capillary Fluids

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Abstract

The talk will be devoted to the high and low-Mach number limit for compressible capillary fluids with density dependent viscosity. We will present recent results concerning high-Mach number flows, weak-strong uniqueness property and dispersion of the acoustic waves in the low-Mach number regime. This is a joint work with Donatella Donatelli (DISIM, L'Aquila) and Lars Eric Hientzsch (KIT, Karlsruhe).

References

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[3] Caggio, M.; Donatelli, D.; Hientzsch, L. E., *Inviscid incompressible limit for capillary fluids with density dependent viscosity,* J. Evol. Equ. 26 (2026), no. 1, Paper No. 43.