Incompressible limits of fluids excited by moving boundaries

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We consider the motion of a viscous compressible fluid confined to a physical space with a time dependent kinematic boundary. We suppose that the characteristic speed of the fluid is dominated by the speed of sound and perform the low Mach number limit in the framework of weak solutions. The standard incompressible Navier-Stokes system is identified as the target problem.

References

[1] *E. Feireisl, O. Kreml, Š. Nečasová, J. Neustupa, J. Stebel*: Incompressible limits of fluids excited by moving boundaries. Preprint No. 14-2013, Institute of Mathematics AS CR.