

The Compressible Navier–Stokes Equations with Slip Boundary Conditions of Friction Type

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We present, for the first time, the compressible Navier–Stokes equations with the slip boundary condition of friction type. We prove the existence of weak solutions in this setting. Since the slip boundary condition of friction type is particularly interesting for the modelling of fluids in moving domains or fluid–structure interaction, our result can be considered as a first stepping stone towards the study of these more sophisticated problems.

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