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Convergence and error estimates for the compressible Navier-Stokes equations

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SUMMARY

In this talk we will consider some numerical schemes for the computation of approximate solutions of the compressible Navier-Stokes equations with a perfect gas equation of state. In the evolution case, we will give some error estimates when the solution of the continuous system is regular enough. Without regularity hypothesis on the solution of the continuous system, we will present some convergence results (up to subsequence) of the approximate solutions to an exact solution, essentially for the stationary case.

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