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Exact Controllability to Trajectories and Recent Results for Navier Stokes Equations

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We will present the notion of exact controllability to trajectories for evolutions systems, in particular for dissipative systems. The basic mathematical tool for solving these problems consists in finding global Carleman estimates for adjoint equations. We will present the recent results concerning global Carleman estimates for the linearized Navier Stokes equations and the application to local results of exact controllability to trajectories for the Navier Stokes equations.