TITLE: Global asymptotic stability of solutions to Navier-Stokes system

ABSTRACT: The Navier-Stokes system for an incompressible fluid either in the whole space or in an exterior domain will be discussed. It is well known that, in several cases, such an initial-boundary value problem has a unique global-in-time solution (e.g. for sufficiently small initial data).

We showed that such global-in-time solutions are asymptotically stable under certain arbitrary large perturbations of their initial conditions.

This is a joint work with Dominika Pilarczyk, Maria E. Schonbek, Dragos Iftimie, & Christophe Lacave.