## 1113-35-121 **Roberto Triggiani\*** (rtrggani@memphis.edu) and Irena Lasiecka. Stabilization to an equilibrium of the 2d-, 3d- Navier-Stokes equations by 'tangential' feedback controls with arbitrarily small support.

Uniform stabilization in the neighborhood of an unstable equilibrium of the Navier-Stokes equations is considered. It is shown that in 2 and 3 dimensions such equilibrium can be stabilized by purely tangential action of feedback boundary and interior control. The support of such feedback controls can be arbitrary small-but needs to be localized in a boundary layer. In contrast with prior literature, this result is proved without any assumptions imposed on the spectral properties of the Oseen's operator. This is joint work with I.Lasiecka. (Received August 16, 2015)