1038-35-274   **Oleg Yu. Emanouilov*** (`oleg@math.colostate.edu`), 101 Weber Building, Depart. of Math., CSU, Fort Collins, CO 80523. *Recent Carleman estimates for the Stokes system and applications.*

We prove a new Carleman estimate for general linear second order parabolic equation with nonhomogeneous boundary conditions. On basis of this estimate we obtain an improved Carleman estimate for the Stokes system. The esitmate for the Stokes system implies new controllability results for the Navier-Stokes system. (Received February 11, 2008)