1020-49-149 **Andrzej Swiech*** (swiech@math.gatech.edu), School of Mathematics, Georgia Institute of Technology, Atlanta, GA 30332. *Large deviations for stochastic Navier-Stokes equations using Hamilton-Jacobi-Bellman equations.*

We will present recent results on Hamilton-Jacobi-Bellman equations associated with optimal control of stochastic Navier-Stokes equations. In particular we will discuss the method of half-relaxed limits for such equations and its applications to establish large deviation principle at single times for solutions of stochastic Navier-Stokes equations with small noise intensities. (Received August 25, 2006)