1053-35-206 **Zhouping Xin*** (zpxin@ims.cuhk.edu.hk), Room 701, Academic Building No. 1, The Chines, University of Hong Kong, Sha Tin, New Territories, Hong Kong , Hong Kong. *Vanishing Viscosity Limit for Navier-Stokes Systems.* Preliminary report.

In this talk, I will discuss soem results on the vanishing viscosity limits for incompressible Navier-Stokes systems with varios boundary conditions. In particular, we discuss the boundary layer behavior for the Navier-slip boundary conditions with slip length depending on the viscosity coefficient and well-posedness theory for Prandtl's boundary layer systems. Some convergence results will be presented also. (Received September 04, 2009)