Lina Wu* (lwu@bmcc.cuny.edu), 529 West 42nd Street Apt. 5K, New York, NY 10036, and Jia Liu. Numerical Iterative Method in solutions to Navier-Stokes Equations as In-compressible Fluid Flow Models. Preliminary report.

We are interested in discovering new numerical solvers for Navier-Stokes equations by using preconditioned Krylov subspace iterative methods. We would like to show the robust behaviors for Navier-Stokes problems as fluid flow models, such as in fluid motion, in fluid pressure, and in fluid force. At the end of this presentation, we will test the stability from equilibrium solutions to Navier-Stokes equations with regards to interruptions. (Received September 16, 2018)