Guoping Zhang* (guoping.zhang@morgan.edu), 1700 E Cold Spring Ln, Baltimore, MD 20854, and Mingchao Cai (mingchao.cai@morgan.edu). Normal Mode Analysis of 3D Incompressible Viscous Fluid Flow Models. Preliminary report.

In this talk, we investigate the normal mode solutions of 3D incompressible viscous fluid flow models with no-slip boundary condition. The obtained theoretical results are then applied to analyze several time-stepping schemes for the numerical solutions of the 3D incompressible fluid flow models. (Received September 19, 2018)