

1116-65-1574 **Ramjee P Sharma*** (ramjee.sharma@ung.edu), University of North Georgia, 3820 Mundy Mill Rd, Gainesville, GA 30503. *Implementation of Anderson Acceleration to Parallel Pseudo-Spectral Method*. Preliminary report.

Pseudo-spectral methods are widely used in solving non-linear partial differential equations. In this talk we will present techniques to compute large-scale nonlinear problems that arise in fluid dynamics using parallel pseudo-spectral method. The main focus will be on how to deal with the nonlinear parts of the equation, how to apply effective filters to the program and also how to parallelize the legacy codes. In addition, we will also present some results from the implementation of Anderson Acceleration to the parallel pseudo-spectral method. (Received September 20, 2015)