Meeting: 1002, Pittsburgh, Pennsylvania, SS 5A, Special Session on Multiscale Algorithms in Computational Fluid Dynamics

1002-76-156 Argus Adrian Dunca* (adunca@umich.edu), 4835 East Hall, Ann Arbor, MI 48109. The approximate deconvolution method for the large eddy simulation of turbulent flows in a bounded domain. Preliminary report.

The approximate deconvolution method has been introduced by S. Stolz and NA Adams in a series of papers. It was shown that the approximate deconvolution method produces very good results in the numerical simulation of turbulent flows. In this talk the mathematical analysis of this method in a bounded domain will be presented. (Received September 13, 2004)