James Glimm* (glimm@ams.sunsyb.edu), Dept. of Applied Math & Statistics, Math Tower, Room P-138A, Stony Brook University, Stony Brook, NY 11789. Scientific Computing At Stony Brook University.

The Stony Brook Applied Mathematics Department, and the New York Center for Computational Science (NYCCS) offer research programs in awide variety of computational science research areas. This talk will serve to introduce a few of these, including models of spray andbreakup of a jet of diesel fuel in a diesel engine, models of fueling of the ITER magnetically confined fusion reactor, design of a scram jet, and design of methods to impede flow of contaminants in ground water. (Received September 15, 2008)