Abstract Submitted for the DPP97 Meeting of The American Physical Society

Sorting Category: 5.1.1.2 (experimental)

Development of a New System for Transport Simulation and Analysis at General Atomics¹ H.E. ST. JOHN, Q. PENG, J. FREEMAN, General Atomics, J. CROTINGER, Lawrence Livermore National Laboratory — General Atomics has begun a long term program to improve all aspects of experimental data analysis related to DIII-D. The object is to make local and visiting physicists as productive as possible, with only a small investment in training, by developing intuitive, sophisticated interfaces to existing and newly created computer programs. Here we describe our initial work and results of a pilot project in this program. The pilot project is a collaboratory effort between LLNL and GA which will ultimately result in the merger of Corsica and ONETWO (and selected modules from other codes) into a new advanced transport code system. The initial goal is to produce a graphical user interface to the transport code ONETWO which will couple to a programmable (steerable) front end designed for the transport system. This will be an object oriented scheme written primarily in python. The programmable application will integrate existing C, C⁺⁺, and Fortran methods in a single computational paradigm. Its most important feature is the use of plug in physics modules which will allow a high degree of customization.

¹Work supported by U.S. DOE Contracts DE-AC03-89ER51114 and W-7405-ENG48.

	Prefer Oral Session
Х	Prefer Poster Session

H.E. St. John stjohn@gav.gat.com General Atomics

Date submitted: July 7, 1997 Electronic form version 1.2