## Abstract Submitted for the DPP97 Meeting of The American Physical Society

Sorting Category: 9 (Theoretical)

Development of a Graphical User Interface to Assess Solutions of 2-D Plasma Transport Equations<sup>1</sup> C. HOLLAND, Johns Hopkins University, R. MAINGI, R. OWEN, Oak Ridge National Laboratory, R.I. PINSKER, General Atomics — Computational methods and modeling provide an important bridge between theory and experiment, especially in plasma physics. A graphical user interface (GUI) has been developed for the edge plasma transport code b2.5.<sup>2</sup> Development of this GUI will facilitate more detailed analysis of individual components of the transport equations, as previously it was difficult to obtain anything other than an overall picture of the transport. The GUI allows plotting of densities, velocities, temperatures, and particle heat fluxes, and is designed to be portable. Using this GUI, solutions to the 2-D edge plasma transport equations are assessed with the aim of studying divertor physics. This GUI will be used to study the effect of changing plasma density on the ratio of heat flux flowing to the inboard ond outboard sides of the divertor. Data and simulations will be presented.

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<sup>2</sup>B.J. Braams, Contrib. Plasma Phys. **36** (1996) 276.

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