

Abstract Submitted  
for the DPP98 Meeting of  
The American Physical Society

Sorting Category: 5.1.1.2 (experimental)

**A Suite of Tools for EFIT Analysis Using Object-Oriented Programming (OOP)**<sup>1</sup> Q. PENG, J. SCHACHTER, C. CAMPO, D.P. SCHISSEL, General Atomics, T.B. TERPSTRA, Princeton Plasma Physics Laboratory — A new graphic package, GaPlotObj, developed in corporation with Fanning Software Consulting, using OOP techniques provides a unified interface with great flexibility in presenting and analyzing scientific data. Taking advantage of object-orientation, the functionality is self-contained, readily expandable and may be used in various applications. The first such application is EFITViewer, a graphic viewer for the equilibrium reconstruction code EFIT. It provides the graphics of equilibria, fitting qualities, and profiles. The comparisons between discharges and diagnostic overlays are just a mouse-click away. An interactive EFIT, IEFIT, has been created that allows physicists to rapidly optimize an equilibrium. The interactivity reduces the process to minutes from the usual hours. Another dimension of the EFIT analysis is the Kinetic EFIT. This once time consuming analysis has been sped up by a stream-lined interface. The poster will present the description and a live demo of the GaPlotObj and the EFIT tools.

<sup>1</sup>Supported by U.S. DOE Contracts DE-AC03-89ER51114 and DE-AC02-76CH03073.

- Prefer Oral Session  
 Prefer Poster Session

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Special instructions: DIII-D Poster Session (divertor physics, disruptions, RF, & diagnostics), immediately following Schissel

Date submitted: July 21, 1998

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