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Sorting Category: 5.1.1.2 (Computation/Simulation)

Enhanced Computational Infrastructure for Data Analysis at the DIII-D National Fusion Facility¹ D.P. SCHISSEL, Q. PENG, J. SCHACHTER, J. FREEMAN, K.M. KEITH, B.B. MC HARG, JR., C.T. PARKER, General Atomics, T.B. TERPSTRA, Princeton Plasma Physics Laboratory, T.A. CASPER, R. JONG, W.H. MEYER, Lawrence Livermore National Laboratory — Enhancements to the computer hardware infrastructure have been implemented recently at the DIII-D National Fusion Facility. Utilizing these improvements to the hardware infrastructure, software enhancements are focusing on streamlined analysis, automation and graphical user interface (GUI) systems to enlarge the user base. Work to enhance the computational infrastructure has also included a significant effort to aid the remote collaborator since the DIII-D National Team consists of scientists drawn from multiple research institutions worldwide. The adoption of the load balancing software LSF Suite has dramatically increased the availability of CPU cycles. Streamlined analysis has been aided by the transition to Unix based MDSplus which currently stores 32 GB/4300 shots of analyzed data. Data viewing and analysis tool work focuses on efficient GUI design with object oriented programming for maximum code flexibility.

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Prefer Poster Session	General Atomics

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