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Category Number and Subject: 5.6.2. DIII-D Tokamak

[] Theory [X] Experiment

Upgraded Thomson Scattering System at DIII-D,* B.D. Bray, D.M. Ponce, C. Liu, T.M. Deterly, M. Watkins, *General Atomics* — The DIII-D Thomson scattering system is undergoing a significant upgrade. Four new 1 Joule, 50 Hz ND:YAG lasers are being installed at DIII-D. These lasers will significantly increase the measurement frequency when they are added to the current set of eight 0.5 Joule, 20 Hz lasers. The increased laser power will also improve measurement accuracy. Installation of the new lasers required an expansion of the Thomson laser room, a replacement of the Thomson laser control system and an upgraded laser path to the DIII-D vessel. The upgrade plan and status as well as plans for the 2011 run campaign will be presented.

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