Abstract Submitted
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Sorting Category: 6.6.2 (Experimental)

An Alignment Feedback System for the Thomson System at DIII-D[1] B.D. BRAY, C.L. HSIEH, C. MAKARIOU, General Atomics — The DIII-D Thomson system measures electron density and temperature with eight pulsed ND:YAG lasers along three 35 m paths through the plasma vessel. The density measurement is especially sensitive to any drift in the laser alignment during operation days at DIII-D. This sensitivity includes the drift of the lasers relative to the collection optics during plasma operations and changes in light levels scattered from the vessel walls during calibrations. A new feedback system is being installed to control the drift of the eight ND:YAG lasers as well as three HeNe lasers used to align the ND:YAG lasers along the three laser paths. The feedback system will use six CCD cameras and motorized mirror mounts to stabilize the alignment HeNe laser along each path. Separate motorized mirrors are used to align the ND:YAG lasers along the same path as the HeNe lasers. The system is currently being installed and tested for operation during the 2001 experimental campaign.

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☐ Prefer Oral Session
☒ Prefer Poster Session

Special instructions: Diagnostics, immediately following L Zeng

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