

Abstract Submitted
for the DPP00 Meeting of
The American Physical Society

Sorting Category: 6.6.2 (Experimental)

Overview of Pellet Injection on DIII-D Tokamak from the High Field Side, the Low Field Side, and the Top¹ T.C. JERNIGAN, L.R. BAYLOR, S.K. COMBS, W.A. HOULBERG, Princeton Plasma Physics Laboratory, P.B. PARKS, General Atomics — Deuterium pellets have been injected into DIII-D from the inside wall, the outside, and the top. When the injection point is inside the magnetic axis of the plasma, the fueling efficiency has proven to be significantly higher (approaching 100% in some circumstances) than when the injection point is outside of the magnetic axis. This is attributed to the outward radial motion of the ablated plasma cloud.² A plasma deposition model by Parks,³ has been incorporated in the pellet code to compare with the experimental deposition. An additional slow injector ($v_{\text{pellet}} \leq 200$ m/s) has been installed. This will allow comparison with inside launch injection near the midplane vs injection from higher on the inside wall (26 degree downward vs 56 degree downward).

¹Supported by US DOE Contracts DE-AC02-76CH03073 and DE-AC03-99ER54463.

²P.T. Lang, et al., Phys. Rev. Lett. **79**,1478 (1997).

³P.B. Parks, Phys. Plasmas **5**, (2000).

Prefer Oral Session
Prefer Poster Session

T.C. Jernigan
jernigantc@ornl.gov
Princeton Plasma Physics Laboratory

Special instructions: 9th poster in Transport Core Session (before Hsieh, after West)

Date submitted: July 12, 2000

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