

Abstract Submitted  
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**Field-reversed configuration experiments with lithium-coated vessel walls** MAX WYMAN, DEEPAK GUPTA, JON SCHROEDER, MATT THOMPSON, Tri Alpha Energy, TAE TEAM — In C-2, two high-beta plasmas are merged to produce a field-reversed configuration (FRC) plasma. A system of evaporators has been installed on the C-2 experiment's confinement chamber in order to produce a solid lithium coating on the plasma facing wall. The lithium evaporator system is capable of depositing up to 80 mg/min over the  $\sim 20 \text{ m}^2$  inner surface of the confinement chamber. The effect of the lithium coating is investigated using internal (including a 6-chord interferometer, multi-point Thomson scattering, and a  $D_\alpha$  array) and edge (including fast ion gauges, magnetic probes, and triple probe) diagnostics. Preliminary data shows a decrease in  $D_\alpha$  emission indicative of a drop in wall recycling.

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