

Abstract Submitted
for the DPP05 Meeting of
The American Physical Society

Progress on the Lithium Tokamak Experiment¹ R. KAITA, R. MAJESKI, T. GRAY, T. KOZUB, H. KUGEL, R. PARSELLS, C. PRINISKI, J. SPALETA, J. TIMBERLAKE, L. ZAKHAROV, PPPL, V. SOUKHANOVSKII, LLNL, S. KRASHENINNIKOV, UCSD, L. BAYLOR, R. MAINGI, ORNL — The goal of the Lithium Tokamak eXperiment (LTX) is to produce tokamak discharges with near-zero recycling, and investigate the consequences of operating under this extreme condition for plasma transport and stability. A major component of LTX is a conducting copper shell with a dynamically-bonded stainless steel liner as the plasma facing component (PFC). Fabrication of a prototype shell section has demonstrated that the tolerances required for conformity to the plasma shape can be maintained. A lithium coating will provide the low recycling PFC on LTX. The goal of depositing 100 nm lithium layers within the five minute interval between discharges has been achieved. Details of the progress in these areas and the status of other LTX tasks will be reported.

¹Supported by US DOE contract #DE-AC02-76CH-03073

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Date submitted: 26 Aug 2005

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