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The Lithium Tokamak eXperiment (LTX) – Status and Plans<sup>1</sup> RICHARD MAJESKI, Princeton Plasma Physics Lab, L. BERZAK, D. BOYLE, S. GERSHMAN, E. GRANSTEDT, C.M. JACOBSON, A.D. JONES, R. KAITA, T. KOZUB, B. LEBLANC, D.P. LUNDBERG, K. SNIECKUS, T. STRICKLER, J. TIMBERLAKE, L. ZAKHAROV, PPPL, G.V. PEREVERZEV, IPP-Garching, V. SOUKHANOVSKII, LLNL, C.E. THOMAS, Third Dimension — LTX is a modest spherical tokamak with R=0.4 m, a=0.26 m, =1.5,  $B_{toroidal}$  = 3.4 kG,  $I_P$ < 400 kA,and  $\tau_{flattop} > 50$  msec. The LTX research objective is to investigate modifications to equilibria and transport when global recycling is reduced to very low values (<50%), by means of a conformal stainless steel clad copper wall coated with liquid lithium. The resistively heated wall is capable of operating at temperatures exceeding 500C, but the nominal operating temperature range will be room temperature to 400C. Initial lithium operation will employ evaporative coatings applied to the heated wall. Pulsed fueling with gas jets and an H<sub>2</sub> cluster injector will be employed to transiently eliminate edge gas. Diagnostic plans are extensive, and are discussed in companion posters by L. Berzak, D. Lundberg, S. Gershman, E. Granstedt, C. M. Jacobson, and C. E. Thomas.

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