

Abstract Submitted  
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**Overview of the Lithium Tokamak eXperiment (LTX)<sup>1</sup>** R. KAITA, L. BERZAK-HOPKINS, D.P. BOYLE, E.M. GRANSTEDT, J. HARE, C.M. JACOBSON, M.A. JAWORSKI, T. KOZUB, B. LEBLANC, M. LUCIA, D.P. LUNDBERG, R. MAJESKI, E. SHI, J. SQUIRE, J.C. SCHMITT, D.P. STOTLER, L. ZAKHAROV, PPPL, L.R. BAYLOR, T.M. BIEWER, T.K. GRAY, R. MAINGI, ORNL, S. KUBOTA, UCLA, C.E. THOMAS, Third Dimension Technologies, K. TRITZ, Johns Hopkins U., J. CLEMENTSON, LLNL — The Lithium Tokamak eXperiment (LTX) is a spherical tokamak for investigating the low-recycling regime achieved with lithium plasma-facing components (PFCs). They consist of a stainless steel liner on copper plates that form a shell conformal to the last closed flux surface of the LTX design equilibrium. The liner is coated with lithium, and discharges up to 65 kA have been achieved. To create liquid lithium PFCs, a lithium filler is used to deposit liquid lithium directly onto the lower shell reservoirs. New diagnostic capabilities include upgraded passive charge-exchange recombination spectroscopy (ChERS) for ion temperatures and plasma flows, additional edge Thomson scattering channels, an extreme ultraviolet spectrometer, and a multichannel microwave reflectome

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Robert Kaita  
Princeton Plasma Physics Laboratory

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