

Abstract Submitted
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Progress on the Implementation of a Neutral Beam for the Lithium Tokamak eXperiment-Beta¹ ENRIQUE MERINO, THOMAS KOZUB, DENNIS BOYLE, RICHARD MAJESKI, ROBERT KAITA, Princeton Plasma Physics Laboratory, ARTEM SMIRNOV, Tri-Alpha Energy, Inc., RYAN CATALANO, North Brunswick Township High School — In the Lithium Tokamak eXperiment (LTX), good performance discharges have been achieved with reduced-recycling lithium walls. Two hydrogen neutral beams (NB) have been loaned to the LTX project by Tri-Alpha Energy, Inc. To further improve plasma parameters, one of these neutral beams is being installed as part of an upgrade to LTX (LTX-Beta). Current ohmic input power in LTX is less than 100 kW. The NB will provide core plasma fueling with up to 700 kW of injected power. Requirements for accommodating the NB include the addition of injection and beam-dump ports on the vessel, and their designs have been finalized. Progress has also been made on the NB power supplies, including the preparation of a new room to accommodate them. A description of these activities and the status of other improvements to LTX for LTX-Beta will be presented.

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