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## Optimization of CW Polarized Positron Source for JLab

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This contribution describes optimized layouts of a positron injector anticipated for generating polarized and unpolarized positron beams for the CEBAF accelerator at the Thomas Jefferson National Accelerator Facility (JLab). This injector should provide polarized beams (>60%) with intensity >50 nA, or higher intensity “unpolarized” beam with intensity >3 uA.

The layouts of the positron injector were optimized to meet the beam requirements needed for injection into the CEBAF accelerator and to enable acceleration to 12 GeV. The optimized positron injector layouts were designed to accommodate the CEBAF high acceptance experimental program, with a continuous wave (CW 1497 MHz) positron bunch structure necessary for injection and acceleration. The positrons are created by bremsstrahlung and pair production in a single solid rotating target (presented at the same workshop). The strategy, layouts and optimizations for forming the positron beams will be presented.

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