

## **Beam Optics for Parity Experiments**

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Parity-violating electron scattering experiments have stringent requirements on the maximum allowed helicity-correlated beam position and angle differences that can be tolerated at the target. In the past, most of the effort in this area has gone into optimizing the setup of the polarized source laser optics and implementation of feedback systems on the laser beam. Another avenue for reduction of the position and angle differences is through optimization of the electron beam optics in the injector, accelerator, and transport lines to the experimental halls. When the beam optics is properly set up, there is a natural reduction in the amplitude of transverse beam motion expected. This is referred to as adiabatic damping. Recently at Jefferson Lab, there have been efforts to insure that the full expected adiabatic damping is achieved. This talk will report on the status of those efforts and other related efforts such as the phase trombone concept being implemented for the Hall A HAPPEX experiment.