

Abstract Submitted
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Development of Laser Blow-Off Impurity Injection Experiments for the HSX Stellarator¹ C. CLARK, D.T. ANDERSON, F.S.B. ANDERSON, J.N. TALMADGE, HSX Plasma Lab - UW Madison — At HSX, we are assembling an experimental program designed to investigate impurity transport in a quasisymmetric stellarator. The laser blow-off impurity injection technique that will be used in this system rapidly deposits a small, controlled quantity of aluminum, iron, boron or silicon into the confinement volume. A mix of bolometers, soft x-ray detectors, and a VUV spectrometer will then be used to track the radial transport of the chosen impurity. The data from these measurements will be processed into transport coefficients with the transport code, STRAHL. Simulations of the light emitted by trace levels of injected aluminum using STRAHL and atomic data from ADAS will be shown.

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