

Abstract Submitted
for the DAMOP10 Meeting of
The American Physical Society

The collimation of intense atomic beams by parallel tube-arrays

JOHN HUCKANS, Bloomsburg University of Pennsylvania — We report on a series of experiments to characterize the collimation of atomic vapor beams. Hot ${}^6\text{Li}$ atoms were emitted from an atomic beam source and collimated by various tube-array sections. Flux intensity profiles were obtained with several arrays for tubes having a range of shape factors, $\gamma = d/L$. Measurements were made in the molecular and hydrodynamic flow regimes (i.e. for different Knudsen parameters).

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Date submitted: 26 Jan 2010

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