

Abstract Submitted
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Rayleigh scattering from argon clusters in a planar expansion¹

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JOSEPH SUELZER, IPFW — Rayleigh scattering is presented as the evidence for
the presence of large argon clusters formed in a planar expansion. Based on the ob-
served scattering signal, the dependence of mean cluster size on stagnation pressure
is $\langle N \rangle \propto P_0^{3.38}$. This is in contrast to the dependence of the mean cluster size on
stagnation pressure for a symmetric expansion of $\langle N \rangle \propto P_0^{2.29}$. Using interferometry
in conjunction with the Rayleigh scattering signal we are able to estimate the mean
cluster size for clusters formed in the planar expansion.

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