Study of super-Alfvénic to sub-Alfvénic transition of a laser-plasma flow in the LAPD*

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We present laboratory experiments on a laser-produced plasma flow as it transitions from a super-Alfvénic ($M_A>3$) to sub-Alfvénic velocity in a large ambient magnetized plasma. The magnetohydrodynamic response of the ambient plasma is measured with magnetic pickup coils and Langmuir probes.

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