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Interaction of co-propagating jets in the presence of an external magnetic field MICHAEL MACDONALD, University of Michigan, HUGO DOYLE, University of Oxford, ERIK BRAMBRINK, Ecole Polytechnique, ROBERT CROWSTON, University of York, R. PAUL DRAKE, CAROLYN KU-RANZ, University of Michigan, DON LAMB, University of Chicago, MICHEL KOENIG, Ecole Polytechnique, PAWEL KOZLOWSKI, University of Oxford, JEAN-RAPHAEL MARQUES, Ecole Polytechnique, JENA MEINECKE, University of Oxford, ALEXANDER PELKA, ALESSANDRA RAVASIO, Ecole Polytechnique, BRIAN REVILLE, Queens University Belfast, PETROS TZEFERACOS, University of Chicago, NIGEL WOOSLEY, University of York, GIANLUCA GRE-GORI, University of Oxford, ACSEL COLLABORATION — We observed the interaction of two co-propagating jets in 1 mbar of argon gas in the presence of an external magnetic field at the LULI laser facility. The jets were created by irradiating a 100 μ m aluminum foil with two 1.5 ns laser pulses separated by 5 mm, each containing 500 J of 527 nm light. Optical interferometry and schlieren imaging were used to observe the flow of the interacting jets. Additionally, an induction coil was fielded to measure the magnetic field 3 cm from the initiation of the flows. Measurements were made with and without a 0.5 T external magnetic field. Preliminary results and analysis will be presented. The research leading to these results has received funding from the European Research Council under the European Community's Seventh Framework Programme (FP7/2007-2013) / ERC grant agreement no. 256973. and by the NNSA-DS and SC-OFES Joint Program in High-Energy-Density Laboratory Plasmas, grant number DE-NA0001840.

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