

Abstract Submitted  
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**Investigation of Magnetic Field Topology in Counter-Propagating Flows from Proton Fluence Data**<sup>1</sup> S. GHOSH, R. JONNALAGDDA, University of California San Diego, M.J.-E. MANUEL, General Atomics-San Diego, C.M. HUNTINGTON, Lawrence Livermore National Laboratory, M. ADAMS, University of Rochester, New York, A. HIGGINSON, University of California San Diego, B.A. REMINGTON, J.S. ROSS, D.D. RYUTOV, Lawrence Livermore National Laboratory, Y. SAKAWA, Osaka University, H. SIO, Massachusetts Institute of Technology, G.F. SWADLING, S.C. WILKS, Lawrence Livermore National Laboratory, F.N. BEG, University of California San Diego, H.-S. PARK, Lawrence Livermore National Laboratory — Collisionless shocks are present in many astrophysical systems. These shocks are generated experimentally at OMEGA laser facility to study Weibel instabilities. The proton probing technique has been used in these experiments to probe the self-generated magnetic fields in the plasma interaction region. We are using the numerical code to assess the B-field strength from the proton flux image data. In particular, we will focus on using the perpendicular deflection field function to calculate path integrated magnetic field. We will also discuss on reconstructing the proton flux image from the path integrated magnetic field.

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