

Abstract Submitted
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Einzel lens calculation and design for the ALPHA Experiment B.

G. COLE, Marquette University, W. A. BERTSCHE, M. A. JOHNSON, University Of Manchester And The Cockcroft Institute, T. D. THARP, Marquette University, ALPHA COLLABORATION — An Einzel lens can be made from a series of hollow, cylindrical conductors charged to different electric potentials. The electric fields within the cylinders can be arranged to electrostatically focus a beam of non-neutral plasma to a certain focal point. Using electric field simulation tools, we explore possible modes of operation of this configuration to see what kinds of geometry and potentials are most favorable for future deployment in the ALPHA antihydrogen experiment at CERN.

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