

Abstract Submitted  
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**Focusing of plasma flow in an E cross B discharge**<sup>1</sup> MARTIN GRISWOLD, YEVGENY RAITSES, NATHANIEL J. FISCH, PPPL — ExB discharges can be used to accelerate ions in a quasi-neutral plasma. Large ion fluxes can be produced in this way because there is no space charge limitation, however difficulty in specifying the electric field distribution results in large flow divergence [1]. Recent work has identified new methods to control the flow divergence [2,3]. We present the results of new techniques that are designed to further reduce the divergence.

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[2] Y. Raitses, L.A. Dorf, A.A. Litvak, and N.J. Fisch, Journal of Applied Physics 88 (2000) 1263.

[3] A. Smirnov, Y. Raitses, and N.J. Fisch, IEEE Transactions on Plasma Science 36 (2008) 1998.

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Martin Griswold  
PPPL

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