

Abstract Submitted
for the GEC13 Meeting of
The American Physical Society

Mitigating chromatic effects for the transverse focusing of intense charged particle beams¹ JAMES MITRANI, PPPL, Princeton University, IGOR KAGANOVICH, PPPL, RONALD DAVIDSON, PPPL, Princeton University — A final focusing scheme designed to minimize chromatic effects is discussed. Solenoids are often used for transverse focusing in accelerator systems that require a charged particle beam with a small focal spot and/or large energy density. A sufficiently large spread in axial momentum will reduce the effectiveness of transverse focusing, and result in chromatic effects on the final focal spot. Placing a weaker solenoid upstream of a stronger final focusing solenoid (FFS) mitigates chromatic effects on transverse beam focusing. J.M. Mitrani *et al.*, Nucl. Inst. Meth. Phys. Res. A (2013) <http://dx.doi.org/10.1016/j.nima.2013.05.09>

¹This work was supported by DOE contract DE-AC02-09CH11466.

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Date submitted: 17 Jul 2013

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