Abstract Submitted
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Fabrication and characterization of end current injection contacts to the quasi-1D conductor NbSe3 R. E. THORNE, K. CICAK, A. F. ISAKOVIC[1], Physics Dept., LASSP, Cornell University — We have successfully fabricated end current injection contacts to the CDW conductor $NbSe_3$ through a combination of electroplating and standard lithographic procedures. These contacts allow direct carrier injection along the direction of CDW motion and produce uniform transverse current and electric field profiles in this highly anisotropic material. The differential conductance of these end-contacted samples shows some quantitative differences from previous measurements [1,2] using side contacts, which are particularly evident in measurements of the condensate current versus phase-slip voltage. This may indicate differences in how phase dislocation loops convert normal carriers to condensate when shear components to the driving force are eliminated. [1] M. P. Maher *et al.*, Phys. Rev. B **52**, 13850 (1995). [2] S. G. Lemay *et al.*, Phys. Rev. B **57**, 12781 (1998).

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