## Abstract Submitted for the MAR06 Meeting of The American Physical Society

Possibilities for graphene for field emission: Modeling studies using the boundary element method¹ SUPINDA WATCHAROTONE, RODNEY S. RUOFF, Department of Mechanical Engineering, Northwestern University, Evanston, IL 60208, FRANK H. READ, Department of Physics and Astronomy, University of Manchester, Manchester, UK — Field emission from a graphene sheet has been modeled with the boundary element method. A modeled flat thin sheet is used. The local electric field and hence the field enhancement factor have been obtained, and the relative magnitude of the field enhancement factors at the corners and the edges has been established. A comparison with field emission from carbon nanotubes will be presented.

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