

Abstract Submitted
for the DPP06 Meeting of
The American Physical Society

A Plasma Algorithm for Plasmoid Accelerator Modeling JOHN
LOVERICH, Advatech Pacific — In this paper we present a discontinuous Galerkin
approach to resistive/ideal MHD and Hall MHD plasma models. Divergence clean-
ing is used to ensure that divergence errors are contained. Results of typical plasma
physics benchmarks and axisymmetric simulations of FRC accelerators for high pow-
ered spacecraft propulsion will be presented.

John Loverich
Advatech Pacific

Date submitted: 27 Jun 2006

Electronic form version 1.4