Lagrangian Method for Warm Electrostatic Plasmas[1] ROBERT
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Michigan State University — A numerical method is presented for warm electro-
static plasmas based on the Lagrangian formulation of the Vlasov-Poisson equa-
tions. The charge flow map is represented by quadrilateral panels in phase space.
The particle-particle force is regularized and panels are adaptively subdivided to
resolve filamentation. Simulations are presented for the dynamics of collisionless
electron beams.

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