

Numerical and analytical issues for Vlasov-Boltzmann-Maxwell systems

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We will survey some recent results for solvers of Boltzmann and Vlasov Maxwell systems as well as qualitative phenomena of the simulations. More specifically, we'll look at the positivity propagation for high order discontinuous Galerkin (DG) schemes, stability and error estimates as well as some numerical results such as BGK formation and applications to inverse problems.