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Recent results on existence, uniqueness and asymptotic decay rates for collisional kinetic models

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We discuss recent work proving exponential time decay rates to equilibrium for Boltzmann equations such as the soft potentials, Landau's equation and the linearized Balescu-Lenard model. We also mention a proof of existence and uniqueness of solutions near Maxwellian to the Vlasov-Maxwell-Boltzmann system in the whole space. Some of these projects are joint work with Yan Guo.

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