

New L^p -stability estimates for the Boltzmann equation with external forces

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We present new stability estimates in L^p for the space inhomogeneous Boltzmann equation with external forces, when initial data is sufficiently small and decaying algebraically in phase space. The stability estimates will be obtained via the nonlinear functional approach proposed by Ha. This extends previous L^1 -stability results for the Boltzmann equation without external forces.