First Born approximation in plasma transport properties description

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The quantum statistical approach to the description of plasma transport properties is analyzed. The consideration basis is the linear response theory in the formulation of Zubarev, the Lenard-Balescu-type collision integrals with dynamical screening of Coulomb interaction.
It is pointed out that in the perturbation theory, started from the Hamiltonian of non-interacting particles, approximations beyond the first Born one are not self-consistent. This leads to the suggestion of the better suitability of the chemical model of plasma, where atoms and molecules with previously determined concentrations are included in Hamiltonian on equal terms with electrons and ions from the very beginning.
Conditions for restrictions with the first Born approximation are formulated.