

BOGOLYUBOV APPROACH TO QUANTUM
PLASMA KINETICS

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S u m m a r y

Starting with the quantum BBGKY-hierarchy for statistical operators, we have obtained a quantum non-Markovian kinetic equation including the dynamical screening of the interaction potential, which exactly takes into account the exchange scattering in a plasma. The collision integral is expressed in terms of the Green function of the linearized Hartree–Fock equation. This quantum kinetic equation corresponds to the law of total energy conservation with account of the polarization and exchange interaction.