

Charge susceptibility in t-J-V model

Tuesday, 16 April 2019 17:00 (2 hours)

We have considered behavior of the static and dynamic charge susceptibilities in a system of electrons with strong correlations in the framework of the t-J-V model at various hole doping. In contrast to other works where the dynamical susceptibility was calculated in the random-phase-type approximation using the representation for the density operator

as a product of single-particle operators we employ an original representation for the density operator and have calculated the collective density-density GF. An exact representation for the dynamic charge susceptibility was derived within the projection method for the relaxation function. The memory function, both its real and imaginary parts, were calculated in the self-consistent Born approximation.

Primary author: Mr NGUYEN, Tung (BLTP-JINR)

Co-author: Prof. PLAKIDA, Nikolai (BLTP_JINR)

Presenters: Prof. PLAKIDA, Nikolai (BLTP_JINR); Mr NGUYEN, Tung (BLTP-JINR)

Session Classification: Poster session