

MAR16-2015-007574

Abstract for an Invited Paper
for the MAR16 Meeting of
the American Physical Society

Short ranged orders in numerical data and STM data, their mechanism and roles.

EUN-AH KIM, Cornell Univ

With the recent experimental breakthrough establishing the short-ranged spin and charge order as universal phenomena in under-doped cuprates, both the origin and the role of these local ordering tendencies take the center stage of cuprates research. In this talk, I will present analysis of short-ranged charge order observed in both our numerical data on multi-band spin-Fermion model and scanning tunneling spectroscopy data. I will discuss the implications of the results in the context of the origin and the role of charge order.