

Applied Magnetic Resonance 2000 vol.19 N3-4, pages 355-362

Magnitude of spin and charge density wave amplitudes in underdoped cuprates

Eremin M., Varlamov S., Eremin I.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

Self-consistent calculation of spin (charge) density wave (S(C)DW) order parameters have been performed for bilayered cuprates on the basis of a singlet-correlated band model. Evolution of the Fermi surface in the strongly underdoped regime is described by a two-band approach. The smooth development of the pseudogap formation temperature from underdoped to overdoped states is explained and the Fourier amplitudes ρ_{sq} (spin) and ρ_{eq} (charge) modulations are calculated. We have found a maximum of the incommensurability for doping $0.09 \div 0.11$ holes per copper site. © Springer-Verlag 2000.
