

物理教室

物性コロキウム

日時：3月20日(木) 16:00 - 17:30

場所：理学部 物理A棟504号室(物理教室会議室)

講師：J.A. Riera (IFCAM, IMR, Univ. of Rosario)

題目：Numerical studies on antiferromagnetism
and superconductivity in the presence
of inhomogeneities in the cuprates

Abstract :

Numerical techniques, in particular zero temperature exact diagonalization, have been very successful in providing some of the most important results for models describing the strongly correlated electron physics of the Cu-O planes in high-T_c superconductors. However, it will be argued that the presence of various kinds of inhomogeneities as well as domain walls appearing due to finite antiferromagnetic domains require numerical studies on larger clusters than the ones considered so far. Two attempts in this direction, the implementation of quantum Monte Carlo techniques and the derivation of effective models in which some degrees of freedom of the original Hamiltonians are projected out will be presented. Some preliminary results obtained along these lines will be discussed.

連絡先：石原 純夫 (217-6436)

15:45 よりコーヒー、紅茶、お菓子を用意します。カップを持ってお集まり下さい。

世話人

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