D-wave density waves in high T_c cuprates and $CeCoIn_5$

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As is well known there are many parallels between high T_c cuprate superconductors and heavy fermion compound $CeCoIn_5$;quasi two dimensional Fermi surfaces,vicinity of antiferromagnetism and d-wave superconductivity. Recently giant Nernst effect and angle dependent magnetoresistance (ADMR) are observed in the pseudogap phases in both high T_c cuprates and $CeCoIn_5$. We shall describe these phenomena in terms of d-wave density waves. Also some properties of the gossamer superconductivity (d-wave superconductivity in the presence of d-wave density wave) will be explored.

9.7 cm

13.4 cm

Subject category :

1. Correlated Electrons and High Temperature Superconductors

Presentation mode :
oral(invited)

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