

Condensed Matter Physics in the City 2014

5th Hubbard Theory Consortium London Summer Programme in Condensed Matter Physics
Week 2 (June 9 - June 13)

Intertwined electronic and atomic order

Monday, June 9:

Chair: Matthais Eschrig (RHUL)

09:30 - 10:00

10:00 - 10:45

10:45 - 11:15

Chair: Giovanni Sordi (RHUL)

11:15 - 11:30

11:30 - 12:15

12:15 - 12:45

Chair: Jorge Quintanilla (Kent)

14:30 - 15:15

15:15 - 15:45

15:45 - 16:30

11 Bedford square, London, WC1B 3RF

Coffee/Tea

Seamus Davis (Cornell), Demonstration of a Magnetic f-Electron Mediated Cooper Pairing Mechanism for Heavy Fermion Superconductivity in CeCoIn5
Discussion

Coffee/Tea

Piers Coleman (Rutgers/RHUL), Some open challenges posed by heavy fermion superconductivity

Discussion

Lunch Break

Amalia Coldea (Oxford), The interplay between the localized and itinerant d electrons in a frustrated antiferromagnetic metal

Discussion

Coffee/Tea and Poster

Tuesday, June 10:

Chair: Andrew Green (UCL)

09:30 - 10:00

10:00 - 10:45

10:45 - 11:15

Chair: Toby Perring (ISIS)

11:15 - 11:30

11:30 - 12:15

12:15 - 12:45

Barlow Room, Roberts Building, Torrington place, London, WC1E 7JE

Coffee/Tea

Seamus Davis (Cornell), Direct phase-sensitive visualization and doping dependence of the d-form factor density wave in underdoped cuprates

Discussion

Coffee/Tea

Stephen Hayden (Bristol), Spin and Charge Correlations in Cuprate Superconductors

Discussion

Lunch Break

Wednesday, June 11:

Chair: Piers Coleman (Rutgers/RHUL)

11:30 - 12:15

12:15 - 12:45

Chair: Toby Perring (ISIS)

14:30 - 15:15

15:15 - 15:45

15:45 - 16:00

Rutherford Appleton Laboratory

Andrey Chubukov (Madison), Exotic ordered spin states in triangular antiferromagnets

Discussion

Lunch Break

Dirk van der Marel (Geneva), Universal scaling and Fermi-liquid like properties of strongly correlated electrons

Discussion

Coffee/Tea

Thursday, June 12:

Chair: Andrew Green (UCL)

09:30 - 10:00

10:00 - 10:45

10:45 - 11:15

11:15 - 11:30

Chair: Giovanni Sordi (RHUL)

11:30 - 12:00

12:00 - 12:15

11 Bedford square, London, WC1B 3RF

Coffee/Tea

Andrey Chubukov (Madison), Charge order in underdoped cuprates -- the magnetic scenario

Discussion

Coffee/Tea

Beng Tan (Cambridge), High Magnetic Field Behaviour of Transport in SmB6

Discussion

Lunch Break

Chair: Meera Parish (UCL)

14:15 - 14:30

14:30 - 15:00

15:00 - 15:15

Chair: Sam Carr (Kent)

15:15 - 15:30

15:30 - 16:15

16:15 - 16:45

Coffee/Tea

Luca Tocchio (Trieste), Spin liquids, collinear- and spiral-order phases in the anisotropic triangular lattice

Discussion

Coffee/Tea

Suchitra Sebastian (Cambridge), Quantum oscillations in the underdoped cuprates

Discussion

Friday, June 13:

Chair: Sam Carr (Kent)

09:00 - 9:30

9:30 - 10:15

10:15 - 10:45

Chair: Piers Coleman (Rutgers/RHUL)

10:45 - 11:00

11:00 - 11:30

11:30 - 11:45

11:45 - 12:30

12:30 - 13:00

Senate House, Room 261, London, WC1E 7HU

Coffee/Tea

Dirk van der Marel (Geneva), Optical properties of viscous electron fluids

Discussion

Coffee/Tea

Lingjia Shen (Birmingham), Probe of magnetic avalanches in Pr_{0.5}Ca_{0.5}Mn_{0.97}Ga_{0.03}O₃ by small angle neutron scattering up to 16.5 T

Discussion

Andrey Chubukov (Madison), A search for exotic superconductivity in Fe-pnictides

Discussion

Lunch Break

