CONDENSED MATTER THEORY BEYOND THE BASICS

• 24 January LECTURE 1 MÖSSBAUER EFFECT

• 26 January

LECTURE 2

FIRST, NEARLY SECOND PHASE TRANSITIONS IN COMPRESSIBLE SOLIDS

• 31 January

LECTURE 3 LIQUID AND SOLID HELIUM

• 2 February

LECTURE 4 SHOENBERG MAGNETISM

• 7 February

LECTURE 5

FACETING OF CRYSTALS, ROUGHENING TRANSITIONS, CRYSTAL GROWTH AND MELTING WAVES

- 9 February LECTURE 6 PARTICLE-HOLE LIQUID IN SEMICINDUCTORS UNDER STONG ILLUMINATION
- 14 February LECTURE 7 ORTHOGONALITY CATASTROPHE
- 16 February LECTURE 8

QUASIPARTICLE'S LIFE TIME IN A FERMI SYSTEM, CLEAN AND DISORDERED

- 21 February LECTURE 9 FERMI LIQUID & COLLECTIVE EXCITATIONS
- 23 February LECTURE 10 MAGNETIC IMPURITIES & KONDO EFFECT
- 28 February LECTURE 11 BAND TAIL IN DISORDERED SOLIDS

• 2 March

LECTURE 12 ZERO-GAP SEMICONDUCTORS AND THEIR SELF-DOPING

• 7 March

LECTURE 13 2D ELECTRON GAS AND QUANTUM HALL EFFECT

• 9 March

LECTURE 14 *COMPOSITE FERMIONS AND FRACTIONAL QUANTUM HALL EFFECT*