PHYS 658. ADVANCED CONDENSED MATTER.

Credits: 3

Offered by: Physics (Graduate Studies)

This course is not offered this catalogue year.

Description

Superconductivity: phenomenology; electron-phonon interaction; BCS theory; gap structure; Ginzburg-Landau formulation; magnetic, transport and thermodynamic properties; vortices; superfluids; unconventional superconductors. Magnetism: local vs itinerant magnetism; magnetic ordering; spin fluctuations; neutron and magnetic X-ray scattering; magnetism at surfaces; frustration. Additional topic amongst: quantum Hall effect; localization; quasicrystals; glasses; etc.

- 3 hours