

22.903 Photon and Neutron Scattering Spectroscopy and Its Applications in Condensed Matter

Midterm Presentation Topics (Power Point file needed)

March 14, 16, 28, 2005; Time for each presentation: 30 min.

1. Photon correlation techniques: an overview.
2. An Overview of the European Neutron Sources
3. Inelastic X-ray Scattering (IXS)
4. Linear response theory for electrical conductivity
5. Hydrodynamic Equations, Transport Properties and Dynamic Structure Factor
6. Analogy Between Incoherent NMR & Neutron Scattering
7. Quasi-Elastic and Inelastic Neutron Scattering Spectrometers
8. Applications of small angle neutron scattering (SANS)
9. Japanese Synchrotron Source – Spring 8