Massachusetts Institute of Technology
Physics Department

Physics 8.514 Fall 03

Many-body phenomena in condensed matter and atomic physics

Last modified: September 13, 2003

	Tr 9/4 Coherent states (PS1 out)
Tu 9/9 Squeezed states (PS2 out)	Tr 9/11 Second quantization, bosons
Tu 9/16 Bose condensation; quasiparticles (PS1 due, PS3 out)	Tr 9/18 Superfluidity, vortices
Tu 9/23 Fermi gases; second quantization (PS2 due, PS4 out)	Tr 9/25 Fermi liquids; collective modes
Tu 9/30 BCS pairing, quasiparticles (PS3 due, PS5 out)	Tr 10/2 Bogoliubov – de Gennes equation
Tu 10/7 Quantized electromagnetic field, photons, E&M vacuum (PS4 due, PS6 out)	Tr 10/9 Atoms interacting with an optical field, Lamb shift
Tu 10/14 Casimir effect (PS5 due, PS7 out)	Tr 10/1 Dicke superradiance
Tu 10/21 TBA (PS6 due, PS8 out)	Tr 10/23
Tu 10/28 (PS7 due, PS9 out)	Tr 10/30
Tu 11/4 (PS8 due, PS10 out)	Tr 11/6
Tu 11/11 Veterans Day – Vacation	Tr 11/13 (PS9 due, PS11 out)
Tu 11/18	Tr 11/20 (PS10 due, PS12 out)
Tu 11/25 (PS11 due, PS13 out)	Tr 11/27 Thanksgiving Vacation
Tu 12/2 (PS12 due)	Tr 12/4
Tu 12/9 (PS13 due)	