

STUDY GUIDE 2

Readings:

- Chapter 16      The concept of optical modes in an optical resonator is introduced. Detailed treatment is given of longitudinal modes (variation of light intensity along direction of beam propagation) in a laser cavity, and also for two closely spaced parallel plates (Fabry-Perot Interferometer).
- Chapter 17      Here the transverse modes are considered. This describes the variation of light intensity perpendicular to direction of beam propagation. The most fundamental transverse mode is that of the Gaussian beam. The properties of Gaussian beams both inside and outside the laser cavity are discussed.

Homework #2 (due Nov. 7):

Ch. 16: problems 2, 4, 7, 8, 9

Ch. 17: problems 4, 6, 9, 11