Physics 428 Light

Syllabus

Instructor: Prof. Aldo D. Migone
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Office Hours: one and a half hours before and one and a half hours after the lectures
Lectures: Tuesday and Thursday 11:00 to 12:15

Topics: This course will focus on physical optics
The subjects that we will study include: the electromagnetic spectrum, radiometry, waves in general, the wave equation, harmonic waves, electromagnetic waves, superposition of waves, standing waves, phase and group velocities, lasers, interference phenomena, Young’s double slit experiment, optical interferometry, Fourier analysis and finite harmonic wave trains, coherence, and diffraction.

Goals: The goals for this course are for the students to become familiar with all the topics listed above and to be able to resolve problems involving the main listed concepts.

Type of assignments: Homeworks will be assigned from the problems at the end of the chapters covered in the textbook(s) and, occasionally, from additional assigned material.

Evaluation: The grades in this course will be determined from:
- Home works
- Midterm Exam(s)
- An all-comprehensive Final Exam