This course will provide a wide-ranging introduction to the field of quantum optics, starting with a brief review of the classical light-matter interaction theory to, later on, develop in detail the semiclassical and quantum approaches.

Teaching staff

Coordinator: VERONICA AHUFINGER

Others: JORDI MOMPART

Teaching methodology

PRESENCIAL TEACHING + ACTIVITIES

Learning objectives of the subject

This course will provide a wide-ranging introduction to the field of quantum optics, starting with a brief review of the classical light-matter interaction theory to, later on, develop in detail the semiclassical and quantum approaches.

Content

Semiclassical theory of atom-field interaction

Degree competences to which the content contributes:

Quantum theory of atom-field interaction

Degree competences to which the content contributes:

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Degree competences to which the content contributes:
Qualification system

- Attendance to be evaluated: > 80% of the lecture time
- Periodic delivery of exercises proposed during the lectures
- Oral exam at the end of the course.

Regulations for carrying out activities

The usual in University teaching

Bibliography

Basic:


Complementary: