



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Photonic Crystals

2223-116R-M9

Title

Photonic Crystals

Teacher(s)

Prof. Massimo Gurioli (Università di Firenze)

Language

English

Short description

1. Elements of electromagnetism
2. Eigenvalue problem in photonics and analogy with quantum mechanics
3. Photonics crystals and photonic bands
4. Negative refraction
5. Point and line defects (cavities and waveguides)
6. Photonics on membranes: high-Q cavities
7. Purcell effect and strong coupling in 3D microcavities
8. Thresholdless laser

CFU / Hours

1 CFU/8 hours

Teaching period

June 2023

Sustainable Development Goals

QUALITY EDUCATION
