



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Photonic Crystals

2223-116R-M9

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#### **Titolo**

Photonic Crystals

#### **Docente(i)**

Prof. Massimo Gurioli (Università di Firenze)

#### **Lingua**

English

#### **Breve descrizione**

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 / Ore**

1 CFU/8 hours

**Periodo di erogazione**

Giugno 2023

**Sustainable Development Goals**

ISTRUZIONE DI QUALITÀ

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