PHYS-605 **Photonic crystals**

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Cursus	Sem.	Type
Photonics		Obl.

Language of teaching	English
Credits	3
Session	
Exam	Oral
Workload	90h
Hours	**42**
Courses	28
Exercises	14
Number of positions	

Frequency

Every 3 years

Remark

Next time: Spring 2020 - To be confirmed

Content

Fabrication of photonic crystals
Tunable photonic crystals
Modeling of the electromagnetic properties
Non-linear optics in photonic crystals
High Q cavities
New concept for passive/active devices
Nanostructured light emitters
Integrated optics
2D-PC in the transmission mode
Quantum light sources

Note

This course will be taught in French

Keywords

photonic crystals, photonic bandgap, non-linear optics, integrated optics

Learning Prerequisites

Recommended courses

Fundamentals of semiconductor physics and optics, basic elements of electronics

Resources

Websites

- http://ipeq.epfl.ch