

a) Speakers: leading experts at international level**Andrea Cattoni (AC)**

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b) Subjects (speaker):**1) Fabrication of nanostructures (AC)**

Nanofabrication by Photons, Charged Beams, Scanning Probes, Replication
Nanoscale Pattern Transfer
New challenges for nanofabrication: light trapping for photovoltaics and biosensing.

2) Semiconductor nanostructures (HvK)

Growth and characterization of epitaxial nanostructures
Strain and strain relieve mechanisms
Structural, optical and electrical characterization of epitaxial nanostructures
Epitaxial growth equipment
Applications of epitaxial nanostructures
Solid state lighting
High electron mobility transistors
Sensors

3) Characterizing 2-dimensional nanostructures (GT)

Surface Diffraction -Surface Microscopy -Surface Spectroscopy
Applications
Properties of the wet electron state on TiO₂(110)
CO domain walls on Pd supported on TiO₂(110)

4) Magnetic nanostructures (PV)

Fabrication - Magnetic and optical properties
Applications

c) Schedule

6 hours per subject, total 24 hours, according to the following schedule (preliminary)

	Monday 10.09	Tuesday 11.09	Wednesday 12.09	Thursday 13.09	Friday 14.09
9.30-12.30		AC2	HvK2	GT2	PV2
14.30-17.30	AC1	HvK1	GT1	PV1	

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