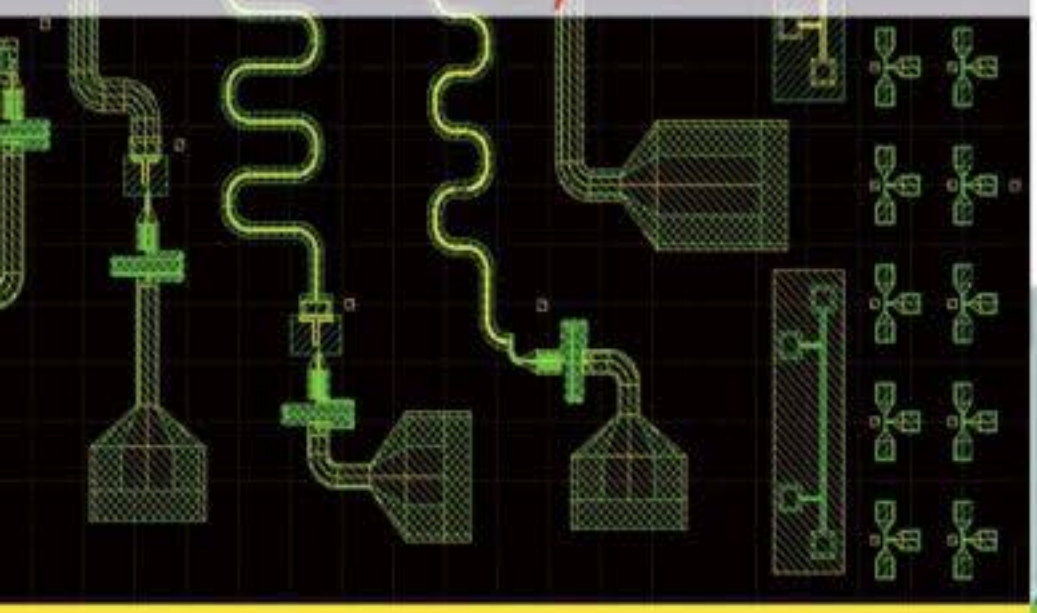
August 25 - September 7
Grenoble, France



ESONN' 2024
European School On Nanosciences and Nanotechnologies

APPLICATIONS online
Open from March until May 12, 2024
www.esonn.fr

LECTURES

SESSION Quantum Science & Technology

A journey through some of the physical properties of 2D materials
Johann CORAUX, Institut Néel-CNRS / Université Grenoble Alpes
Quantum electronic transport
Clemens WINKELMANN, Université Grenoble Alpes
MOSFET physics and technology
Enrico SANGIORGI, University of Bologna
Nano-optics
Val ZWILLER, KTH Royal Institute of Technology, Stockholm & Single Quantum, Delft
Technologies of nanofabrication
Guillermo VILLANUEVA, EPFL, Lausanne
Spin Physics and Spintronics in van der Waals Heterostructures: From Fundamentals to Applications
Stephan ROCHE, ICN2, Barcelona
Near-field microscopies
Hans Joseph HUG, EMPA, Dübendorf & University of Basel

SESSION Nano Bio Sciences

Advanced biophysics to study molecular systems
Ruud HOVIUS, EPFL, Lausanne & Joachim PIGUET, KTH Royal Institute of Technology, Stockholm
Mechanics of molecules and biological structures
Bart HOOGENBOOM, University College London
Nanostructured composite materials: from biological hard tissues to biomimetic and artificial systems
Elena STURM, University of Munich
Nano-oncology
Barbara STELLA, University of Torino
Pros and cons of carbon based nanomaterials / (nano)plastics may not be so fantastic!
Cyrill BUSSY, Centre for Nanotechnology in Medicine, University of Manchester
Particle-based agents for cell tracking using imaging
Mangala SRINIVAS, Université Paris Cité
Luminescence thermometry for biological applications
Erving Clayton XIMENDES, Universidad Autónoma de Madrid

COMMON

Near-field microscopies
Hans Joseph HUG, EMPA, Dübendorf & University of Basel
Round Table
Nathanne ROST & Raphaël LEVY, Univ. Sorbonne Paris Nord
Synthesis of Nanoscale Systems (Title TBC)
Bart Jan RAVOO, University of Münster
Nanotoxicology
Cyrill BUSSY, Centre for Nanotechnology in Medicine, University of Manchester

PRACTICALS

The program emphasizes the role of numerous "hands-on" practicals held at CIME Nanotech cleanroom facilities and in more than 20 research laboratories of Grenoble.
Experiments in laboratories are presented by researchers on their current topics and are thus at the leading edge of the international research (please visit www.esonn.fr for details).

ESONN'2024 is a two-week summer school aimed at providing training for graduate students, postdoctoral and junior scientists coming from all around the world and working in the fields of Nanosciences and Nanotechnologies.

The school offers academic lectures, seminars and practicals delivered by leading experts covering different aspects on elaboration, characterization and functionalities of nano-objects

Almost half of the program is devoted to the laboratory courses, providing unique hands-on learning opportunities.





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