

ESONN'2021

European School
On Nanosciences
and Nanotechnologies

August 23rd / September 11th
Grenoble - France

APPLICATIONS online
Open from February until May 09th, 2021
www.esonn.fr

LECTURES online

Quantum coherent transport and mesoscopic superconductivity

Elke Scheer, University of Konstanz

Electronic transport in low dimensional materials

Luis Hueso, CIC NanoGUNE, San Sebastian

Spintronics

Sergio Valenzuela, Catalan Institute of Nanoscience & Nanotechnology, Barcelona

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, IMT, Lausanne

Nanoscale control of cell adhesion and mechanotransduction

Ada Cavalcanti-Adam, University of Heidelberg & Max Planck Institute

Advanced biophysics to study molecular systems

Ruud Hovius, EPFL, Lausanne

Joachim Piguët, KTH Royal Institute of Technology, Stockholm

Mechanics of molecules and biological structures

Bart Hoogenboom, UCL and Imperial College London

Introduction to nanomedicine

Hervé Hillaireau, University of Paris-Sud

Assessment of the toxicity of nanomaterials - A case study: TiO₂

Armelle Baeza, Denis Diderot University (Paris VII)

Nanostructured composite materials: from biological hard tissues to biomimetic and artificial systems

Elena Sturm, University of Konstanz

Particle-based agents for cell tracking using imaging

Mangala Srinivas, Cenya Imaging, Amsterdam

Near-field microscopies

Hans Hug, EMPA, Dübendorf & University of Basel

Self-assembly for nanotechnologies

Wesley Browne, University of Groningen

From research to business with nanotechnologies - Testimonies

Géraldine Leduc, NH TherAguix & Vincent Bouchiat, GRAPHEAL

Introduction to (nano) toxicology

Armelle Baeza, Denis Diderot University (Paris VII)

Large scale facilities applied for nano-electronic - Virtual visit

Manon Letiche, ILL & , Ennio Capria, ESRF, Grenoble

Nano bubbles: how, when and why does science fail to correct itself?

Raphaël Levy, University of Sorbonne Paris Nord

PRACTICALS in Grenoble

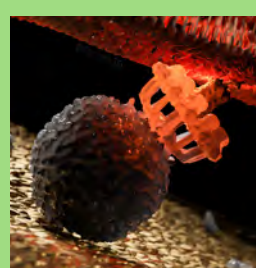
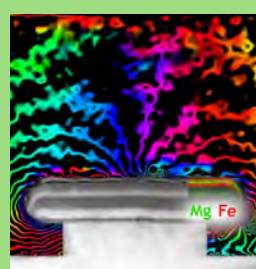
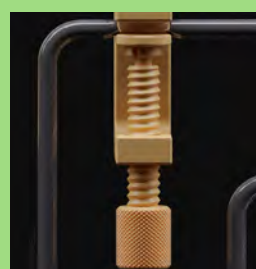
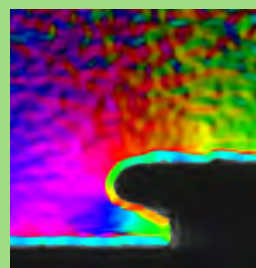
The program emphasizes the role of numerous “hands-on” practicals held at CIME Nanotech cleanroom facilities and in research laboratories of Grenoble.

Experiments in laboratories are presented by researchers on their current topics and are thus at the leading edge of the international research (please refer to the website for details).

ESONN'2021 (18th edition) is a three-week course aimed at providing training for graduate students, postdoctoral and junior scientists coming from universities and laboratories all around the world and working in the fields of Nanosciences and Nanotechnologies.

This 2021 HYBRID edition of the school is comprised of online academic lectures and seminars and also practical courses in Grenoble, all delivered by leading experts covering different aspects on elaboration, characterization and functionalities of nano-objects.

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



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