

Seminars

of the **Physics and Materials** Programme of DSSE in the academic year 2022/2023

Title	Responsible lecturer	Date	Remarks/Room	Learning outcomes	ECTS
Hands-on Python for beginners	Mirela Puleva Valentin Vassilev	October 26 & 28, 2022	26/10: CL BS 0.03 28/10: CL BS 3.03	Basic Python 3 language concepts and syntax. Introduction to the basic elements of programming with variables, array, tuples and dictionaries, arithmetic operations, conditionals, and loops, functions, importing and exporting data.	1
Solar Cells: the Semiconductor basics	Susanne Siebentritt	Winter/Spring 2023	<i>tbd</i>	to obtain a fundamental understanding of the semiconductor physics of a solar cell	1
Microscopy and chemical analysis using charged particles	S. E. Moorthy J-N. Audinot Q. Hoang P. Philipp O. De Castro	January 17, 19, 24, 26, 31, February 2, 7, 9, 14 2023	MSA 2.150	The student will learn the principles of charged particle optics, understand the physics related to the interaction of energetic particle beam on materials, be able to identify strategies to push the instrumental performances to the limits by applying the fundamental physical principles related to the optics as well as particle-matter interactions. The skills gained in this course can be applied immediately in the laboratory in a broad range of experimental research in physics, materials science and beyond.	1
Polymer Physics	Jan Lagerwall	Spring Semester 2023	One 90-minute lecture per week in the form of recorded videos; 3 discussion meetings distributed throughout the semester	See course description on moodle	3
Characterization of Polymers and Plastics (seminars)	Daniel Schmidt	Spring Semester 2023	<i>tbd</i>	See course description on moodle	1
Data Fitting	Mael Guennou	TBD	<i>tbd</i>		<i>tbd</i>
Non-linear Optics	Alexandros Gerakis	TBD (1 or 2 days, Fall or Spring)	<i>tbd</i>		<i>tbd</i>

More is coming. We will inform you about updates.

Registration and more information is available at [moodle](#).

To log into the system you have to be registered at the UL.