

	Ref. code	Title	Lecturer (s)	ECTS	Next period taught Frequency
AS T R O	PHYS 643	Astrophysics V : The Variable Universe	Anderson R.	3	Fall 21 every year
	PHYS 753	Dynamics of Astrophysical Fluids and Plasmas	Schober J.	4	Fall 21 only this year
B I O	PHYS 719	Advanced biomedical imaging methods and instrumentation	Gruetter R., Lanz B., Mor M.	4	Fall 21 every year
	PHYS 631	Fundamentals of superresolution optical microscopy and scanning Probe Microscopy	Sekatski S.	2	Spring 22 every year
C O N D E N S E D M A T T E R	PHYS 630	Advanced experimental methods in condensed matter and nanophysics	Kern K.	2	Summer 22 (block course) / (MPI - Stuttgart) every year
	PHYS 637	Electron Matter Interactions in Transmission Electron Microscopy	Hébert C., Alexander D., Lagrange T.	2	Spring 22 every 2 years
	PHYS 639	Field theory in condensed matter physics	Mudry Ch.	4	Fall 22 every 2 years
	PHYS 636	General aspects of the electronic structure of crystals	Yevtushynsky D.	2	Fall 21 every 2 years
	PHYS 726	Introduction to frustrated magnetism	Mila F.	2	Fall 22 every 3 years
	PHYS 747	Introduction to Metalorganic Vapour Phase Epitaxy of III-V semiconductors	Cantoni M., Dwir B., Grandjean N., Leran J.-B., Rudra A.	1	Spring 22 every year
	PHYS 627	Magnetic and semiconducting nanostructures	Butté R., Rusponi S.	3	Spring 22 every 2 years
	PHYS 640	Neutron Scattering - theory and applications	Rønnow H., Zivkovic I., White J., Schmitt T.	4	Fall 22 every year
	PHYS 645	Physics of Random and Disordered Systems	Müller M.	3	Fall 22 every year
	PHYS 638	Some aspects of topology in condensed matter physics	Mudry Ch.	4	Fall 21 every 2 years
PHYS 745	Spin dynamics	Ansermet J.-Ph., various lecturers	4	Fall 21 every year	

	Ref. code	Title	Lecturer (s)	ECTS	Next period taught Frequency
<b>H I G H E N E R G Y</b>	PHYS 751	Advanced concepts in particle accelerators	Pieloni T., Herr W., Ischebeck R.	4	Spring 22 <i>every year</i>
	PHYS 702	Advanced Quantum Field Theory	Bellazzini B., Monin A.	4	Fall 21 <i>every year</i>
	PHYS 746	Before and Behind the Standard Model	Wulzer A.	2	Fall 21 <i>This year only</i>
	PHYS 739	Conformal Field Theory and Gravity	Penedones J., Hogervorst M., Papadodimas K., Komatsu S.	4	Fall 21 <i>every year</i>
	PHYS 741	Gauge Theories and the Standard Model	Wulzer A., Riembaun M.	4	Fall 21 <i>every year</i>
<b>M I S C</b>	PHYS 644	Lecture series on Advances in Physics	Lingenfelder M., various lecturers	2	Fall 21 <i>every year</i>
	PHYS 752	Lecture series on Biomimetics	Lingenfelder M., invited lecturers	2	Spring 22 <i>every year</i>
	PHYS 754	Lecture series on Scientific Machine Learning	Zdeborová L., various lecturers	2	Fall 21 <i>every year</i>
	PHYS 743	Parallel programming	Lanti E., Richart N.	3	Fall 21 (block course) <i>every year</i>
	PHYS 724	Ultrafast phenomena	Vacat	4	Postponed Fall 22 <i>every year</i>
<b>P L A S M A</b>	PHYS 734	Control and Operation of Tokamaks	Felici F., Moret J.-M.	2	Spring 23 (block course) <i>every 2 years</i>
	PHYS 632	Fusion and Industrial plasma technologies	Alberti S., Bruzzone P., Duval B., Fasel D., Hogge J.-Ph., Howling A., Martin Y., Tran M. Q.	4	Spring 23 <i>every 2 years</i>
	PHYS 731	Magnetic confinement	Fasoli A., Graves J., Loizu J., Ricci P., Sauter O., Testa D., Tran M. Q.	4	Fall 22 <i>every 2 years</i>
	PHYS 732	Plasma Diagnostics in Basic Plasma Physics Devices and Tokamaks: from Principles to Practice	Furno I., Remeirdes H., Labit B.	2	Spring 22 (block course) <i>every 2 years</i>
	PHYS 736	Plasma Instabilities	Brunner S., Graves J.	4	Fall 21 <i>every 2 years</i>
<b>Q S T</b>	PHYS 744	Advanced Topics in Quantum Sciences and Technologies	Brantut J.-Ph., Galland Ch., Savona V.	4	Fall 22 <i>every 2 years</i>
	PHYS 642	Statistical Physics for Optimization and Learning	Krzakala F., Zdeborová L., Loureiro B., Saglietti L.	4	Spring 23 <i>every 2 years</i>
	PHYS 641	Quantum information and quantum computing	Savona V.	4	Fall 21 <i>every year</i>

