

	Ref. code	Title	Lecturer (s)	ECTS	Next period taught Frequency
A S T R O	PHYS 730	Cosmology : dark and luminous matters	Courbin F., Jablonka P.	4	Fall 19 & Spring 20 <i>every full year</i>
	PHYS 708	High energy and space astrophysics	Neronov A., Ferrigno C. (Geneva Observatory)	4	Fall 19 & Spring 20 <i>every full year</i>
	PHYS 709	Stellar evolution and nucleosynthesis	Meynet G. (Geneva Observatory)	5	Fall 19 & Spring 20 <i>every full year</i>
	PHYS 710	Structure and evolution of galaxies	Pfenniger D. (Geneva Observatory)	4	Fall 19 & Spring 20 <i>every full year</i>
B I O	PHYS 719	Advanced biomedical imaging methods and instrumentation	Gruetter R.	4	Fall 19 <i>every year</i>
	PHYS 631	Fundamentals of superresolution optical microscopy and scanning Probe Microscopy	Sekatski S.	2	Spring 20 <i>every year</i>
C O N D E N S E D M A T E R	PHYS 630	Advanced experimental methods in condensed matter and nanophysics	Kern K.	2	Summer 20 (block course) / (MPI - Stuttgart) <i>every year</i>
	PHYS 637	Electron Matter Interactions in Transmission Electron Microscopy	Hébert C., Alexander D., Lagrange T.	2	Spring 20 <i>every 2 years</i>
	PHYS 639	Field theory in condensed matter physics	Mudry Ch.	4	Fall 20 <i>every 2 years</i>
	PHYS 636	General aspects of the electronic structure of crystals	Evtushinsky D.	2	Fall 19 <i>every 2 years</i>
	PHYS 726	Introduction to frustrated magnetism	Mila F.	2	Fall 19 <i>every 3 years</i>
	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 20 <i>every year</i>
	PHYS 627	Magnetic and semiconducting nanostructures	Butté R., Rusponi S.	3	Spring 20 <i>every 2 years</i>
	PHYS 616	Solid State Physics X: experimental techniques	Crepaldi A., Gaal R., Nafradi B., Rønnow H., Zivkovic I.	3	Spring 20 <i>every year</i>
R	PHYS 638	Some aspects of topology in condensed matter physics	Mudry Ch.	4	Fall 19 <i>every 2 years</i>
	PHYS 745	Spin dynamics	Ansermet J.-Ph. & IPHYS colleagues	4	Fall 19 <i>every year</i>

	Ref. code	Title	Lecturer (s)	ECTS	Next period taught Frequency
H I G H E N E R G Y	PHYS 750	Advanced Accelerator Concepts	Ischebeck R.	1	Fall 19 (block course) <i>every year</i>
	PHYS 702	Advanced Quantum Field Theory	Rattazzi R.	4	Fall 19 <i>every year</i>
	PHYS 746	Before and Behind the Standard Model	Wulzer A.	1	Spring 21 <i>every 2 years</i>
	PHYS 739	Conformal Field Theory and Gravity	Penedones J., Meineri M.	4	Fall 19 <i>every year</i>
	PHYS 741	Gauge Theories and the Standard Model	Wulzer A.	4	Fall 19 <i>every year</i>
	PHYS 738	Quantum Field Theory Methods in Gravity and Cosmology	Sibiryakov S.	2	Spring 20 <i>Last time</i>
M I S C	PHYS 743	Parallel programming	Keller V., Richart N.	3	Fall 19 (block course) <i>every year</i>
	PHYS 724	Ultrafast phenomena	Barillot T., Chergui M.	4	Fall 19 <i>every year</i>
	PHYS 625	Using mathematica to analyse and model experimental data	Stadelmann P.	2	Summer 20 (block course) <i>Last time</i>
P L A S M A	PHYS 734	Control and Operation of Tokamaks	Felici F., Moret J.-M.	2	Spring 20 (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 21 <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 20 <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 20 (block course) <i>every 2 years</i>
	PHYS 736	Plasma Instabilities	Brunner S., Graves J.	4	Fall 19 <i>every 2 years</i>
Q S T	PHYS 744	Advanced Topics in Quantum Sciences and Technologies	Brantut J.-Ph., Galland Ch., Kippenberg T., Savona V.	4	Fall 20 <i>every 2 years</i>

Astrophysics
Biophysics
Condensed Matter
High Energy Physics
Miscellaneous
Plasmas
Quantum Science & Technology

If not precised, the courses usually start as of the 1st week of the semester.

** For EDPY PhD students, please enrol with the course registration form **

Please note that this timetable is subject to modifications.