PROGRAMME OF PHYSICS AND ASTRONOMY **2021/22**

CODE 0800-PA-	SUBJECT	sum	winter sem.				summer sem.				credit form	ECTS
			lect.	classes	labor.		lect.	classes	labor.			
	I YEAR 2021/22											
CELMECH	Classical and celestial mechanics	60	30	30							E	5
STELPHYS	Stellar physics	60	30	30							E	5
AMATH	Advanced mathematical methods	75	30	45							E	6
ELFIELD	Electrodynamics and field theory	75	30	45							E	6
QUANTOPT1	Quantum optics 1	60	30	30							E	5
ATMOLPHY	Atomic and molecular physics	60					30	30			E	5
GENREL	General relativity	75					30	45			E	6
	Astrophysics laboratory	45							45		G	3
HENERGY	High-energy astrophysics	30					30				E	3
	Module 1 or 2	90				30				60	G/E	8
MON	Monographic lecture	30					30				E	3
	University-wide courses	50	20				30				G/E	5
		710	**170**	**180**		**30**	**150**	**75**	**45**	**60**		**60**
	II YEAR 2022/23											
CONMAT	Condensed matter physics	30	30								E	3
DIPROS	Diploma proseminar	15				15					G	2
PHYSLAB	Physics laboratory	60			60						G	5
ASTROHYD	Astrohydrodynamics	45	30	15							E	4
DIPSEM	Diploma seminar	15								15	G	2
LASCUNIV	Large-scale Universe	30					30				E	3
MATHES	Master thesis										E	20
COMCHEM	From complex chemistry to new physics	45					45				E	4
	Module 1 or 2	120				60				60	G/E	10
MON	Monographic lecture	30	30								E	3
	University-wide courses	40	20				20				G/E	4
		430	**110**	**15**	**60**	**75**	**95**			**75**		**60**
		1140	**280**	**195**	**60**	**105**	**245**	**75**	**45**	**135**		**120**

Module 1												
QUANTOPT2	Quantum optics 2	60	30	30							E	5
QUANTOL	Quantum optics laboratory	60			60						G	5
OPTELA	Optoelectronics laboratory	60			60						G	5
QUANTINF	Quantum information	30	30								E	3
STAPHY	Statistical physics	60	30	30							E	5
BIOPHY	Biophysics	60					30		30		E	5
												28

Module 2												
INASTRA	Introduction to astrophysics (not for BSc in astronomy)	30	30								E	3
GALAX	Galaxies: formation and evolution	60					30		30		E	5
PLANETSYS	Physics of planetary systems	60					30		30		E	5
THEOASTLA1	Theoretical astrophysics laboratory 1	45			45						G	3
THEOASTLA2	Theoretical astrophysics laboratory 2	45							45		G	3
THEOASTLA3	Theoretical astrophysics laboratory 3	45							45		G	3
ASCHEMA	Astrochemistry and astrobiology	30	30								E	3
												25

Astrophysics laboratory												
OPASTLA	Optical astrophysics laboratory				45						G	3
RADASTRO	Radioastronomy laboratory									45	G	3
												6