



Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Physics International as a Master's with 1 major with the degree "Master of Science" (120 ECTS credits)

Responsible: Faculty of Physics and Astronomy Examination regulations version: 2024 Abbreviations used: Course types: $\mathbf{E} = \text{field trip}$, $\mathbf{K} = \text{colloquium}$, $\mathbf{O} = \text{conversatorium}$, $\mathbf{P} = \text{placement/lab course}$, $\mathbf{R} = \text{project}$, $\mathbf{S} = \text{seminar}$, $\mathbf{T} = \text{tutorial}$, $\mathbf{\ddot{U}} = \text{exercise}$, \mathbf{V} = lecture Term: **SS** = summer semester, **WS** = winter semester Methods of grading: NUM = numerical grade, B/NB = (not) successfully completed Regulations: (L)ASPO = general academic and examination regulations (for teaching-degree programmes), FSB = subject-specific provisions, SFB = list of modules Other: A =thesis, LV =course(s), PL =assessment(s), TN =participants, VL =prerequisite(s) Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not cre-Conventions for the modules in this SFB: ditable for bonus. Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the me-Information on thod of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the assessment procedures: customary manner. Should a module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below. Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

In accordance with the general regulations governing the degree subject described in this module catalogue:

ASPO2015

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

06-Sep-2023 (2023-70)

12-Jun-2024 (2024-75)

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.

Every module will be described using the following form:

Abbreviation	Module title										
	ECTS		Duration		(in semesters)	Method of grading		Module level			
	Courses			o be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y							
	Method of assessment										
	Only after successful completion of			if applicable							
	Other prerequisites			if applicable							
	Participants and allocati- on of places		locati- if	if applicable							
	Additional information		tion if	if applicable							
	Referred to in LPO I		if	if applicable (examination regulations for teaching-degree programmes)							

Electives Field (60	ECTS credits)								
Subfield Physics (5 ECTS credits)								
Advanced Laborate	ory Courses (9 ECTS								
11-P-FM1-Int-201-	Advanced Laborat	rse Master Part 1							
m01	ECTS 3 D	1 semester Method of grading	(not) successfully completed Modul level	graduate					
	Courses	P (3) Module taught in: English							
	Method of assess	practical examination Students must successfully prepare, perform, document (lab notebook) and evaluate (in the form of a scientific publication) an experiment to be considered to have successfully completed this experiment. Students must successfully complete two ex- periments to be considered to have successfully completed this module. Detailed regulations are laid down in the respective module description. Language of assessment: English							
	other prerequisite	reparation and safety briefing.							
11-P-FM2-Int-201-	Advanced Laborat	ie Master Part 2							
moi	ECTS 3 D	1 semester Method of grading	; (not) successfully completed Modul level	graduate					
	Courses	(3) Iodule taught in: English							
	Method of assess	practical examination Students must successfully prepare, perform, document (lab notebook) and evaluate (in the form of a scientific publication) an experiment to be considered to have successfully completed this experiment. Students must successfully complete two ex- periments to be considered to have successfully completed this module. Detailed regulations are laid down in the respective module description. Language of assessment: English							
	other prerequisite	Preparation and safety briefing.							
11-P-FM3-Int-201-	Advanced Laborat	rse Master Part 3							
m01	ECTS 3 D	1 semester Method of grading	(not) successfully completed Modul level	graduate					
	Courses	P (3) Module taught in: English							
	Method of assess	practical examination Students must successfully prepare, perform, document (lab notebook) and evaluate (in the form of a scientific publication) an experiment to be considered to have successfully completed this experiment. Students must successfully complete two ex- periments to be considered to have successfully completed this module. Detailed regulations are laid down in the respective module description. Language of assessment: English							
	other prerequisite	reparation and safety priening.							

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11-P-FM4-Int-201-	Advanced L	aboratory Co	ourse M	Aaster Part 4						
m01	ECTS 3	Duratio	n	1 semester	Method of grading	(not) successfully completed	Modul level	graduate		
	Courses		P (3)	P (3)						
			Modu	Module taught in: English						
	Method of a	assessment	practi	practical examination Students must successfully prepare perform document (lab notebook) and evaluate (in the form of a scientific publication)						
			an experiment to be considered to have successfully completed this experiment. Students must successfully complete two ex-							
			periments to be considered to have successfully completed this module. Detailed regulations are laid down in the respective							
			modu	MOQUIE GESCRIPTION.						
	athor proro	nuicitoc	Dropa	Language of assessment: English						
			Piepa	ination and safety bi	lenng.					
Advanced Seminar	(5 ECTS cred	Its)	•••							
11-0SP-A-Int-201-	Advanced S	eminar Phys	Sics A							
IIIOI	ECTS 5	Duratio	n lo()	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses		S (2) Module taught in: English							
	Method of a	assessment	talk w Langi	/ith discussion (30 t Jage of assessment:	o 45 minutes) : English					
11-0SP-B-Int-201-	Advanced S	eminar Phys	sics B							
m01	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses		S (2) Module taught in: English							
	Method of a	assessment	talk w Langı	talk with discussion (30 to 45 minutes) Language of assessment: English						
Experimental Phys	ics (10 ECTS	credits)	•							
11-BSV-Int-201-	Image and S	Signal Proce	ssing	in Physics						
m01	ECTS 6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses		V (2)	+ Ü (2)			n			
			Module taught in: English							
	Method of a	assessment	a) wri	tten examination (a	pprox. 90 to 120 minu	tes) or b) oral examination of o	one candidate e	each (approx. 30 minutes) or c)		
			prese	ntation/talk (approx	s (groups of 2, appro x, 30 minutes).	x. 30 minutes per candidate) o	r a) project rep	ort (approx. 8 to 10 pages) or e)		
			lfaw	ritten examination w	vas chosen as method	l of assessment, this may be cl	hanged and as	sessment may instead take the		
			form	of an oral examinati	on of one candidate e	ach or an oral examination in g	groups. If the m	ethod of assessment is changed,		
			the le	cturer must inform s	students about this by	tour weeks prior to the originate course is offered and in the	al examination	date at the latest.		
			Langu	lage of assessment:	: English	ne course is oneleu anu ili lite	subsequent St	בוווכסנכו		
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11-0HL-Int-201-	Organi	c Semic	onductor	s							
m01	ECTS	6	Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	es.		V (3) - Modu	/ (3) + R (1) Nodule taught in: English						
	Metho	d of ass	essment	a) wri b) ora c) ora d) pro e) pre lf a wr form o the le Asses Langu	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English						
11-PMM-Int-201-	Physic	s of Adv	anced Ma	aterials	5						
mo1	ECTS	6	Duratio	1	1 semester	Method of grading numerical grade	Modul level	graduate			
	Courses			V (3) - Modu	+ R (1) le taught in: English	1					
	Method of assessment			a) wri oral e prese If a wr form o the le Asses Langu	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English						
11-SPI-Int-201-m01	Spintr	onics									
	ECTS	6	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	!S		V (3) - Modu	+ R (1) le taught in: English	1					
	Method of assessment			a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English							

11-FK2-Int-201-m01	Solid State Physics 2												
	ECTS	8	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V (4) - Modu	/ (4) + R (2) Module taught in: English								
	Metho	d of ass	essment	a) wri oral e prese If a wr form o the le Asses Langu	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English								
	other p	rerequi	sites	Appro	pproval from examination committee required.								
11-FKS-Int-201-m01	Solid S	tate Sp	ectrocopy	/				1					
	ECTS	6	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V (3) - Modu	Module taught in: English								
	Metho	d of ass	essment	a) wri oral e prese If a wr form o the le Asses Langu	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English								
11-MAG-Int-201-	Magne	tism											
m01	ECTS	6	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V (3) - Modu	V (3) + R (1) Module taught in: English								
	Method of assessment			a) wri oral e prese If a wr form o the le Asses Langu	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English								

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11-HNS-Int-201-	Optical Properties of Semiconductor Nanostructures													
m01	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Cours	es		V (3) ·	V (3) + R (1)									
				Modu	Module taught in: English									
	Metho	od of ass	sessment	a) wri oral e prese If a w form the le Asses Langu	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English									
11-HPH-Int-201-	Semic	Semiconductor Physics												
m01	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Cours	es		V (3) · Modu	/ (3) + R (1) Nodule taught in: English									
	Metho	d of ass	sessment	a) wri oral e prese If a w form o the le Asses Langu	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English									
11-QTR-Int-201-	Quant	um Trar	nsport											
m01	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Cours	es		V (3) + R (1) Module taught in: English										
	Methc	d of ass	sessment	a) wri oral e prese If a w form o the le Asses Langu	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English									

11-QIC-Int-201-m01	Advanc	ed The	ory of Qua	ntum	Computing and Qua	ntum Information						
	ECTS	6	Duratior	۱	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V (3) -	(3) + R (1)							
				Modu	Aodule taught in: English							
	Methoo	d of ass	essment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester								
				Langu	Language of assessment: English							
11-NOP-Int-201-	Nano-C	ptics										
m01	ECTS	6	Duratior	۱	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V (3) - Modu	/ (3) + R (1) Module taught in: English							
	Method	1 OF ASS	essment	oral examination (approx. 90 to 120 minutes) of b) oral examination of one candidate each (approx. 30 minutes) of c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English								
11-PTS-Int-201-	Phenor	nenolog	gy and The	eory of Superconductivity								
m01	ECTS	6	Duration	۱	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V (3) + R (1) Module taught in: English								
	Method	d of ass	essment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English								

08-PCM4-161-m01	Ultrafa	st spec	troscopy a	nd qua	antum-control						
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		S (2) + Ü (1)							
	-			Module taught in: German or English							
	Metho	d of ass	essment	a) writ	tten examination (a	pprox. 90 minutes) o	r b) oral examination of one ca	ndidate each (a	pprox. 20 minutes) or c) talk (ap-		
				prox. 30 minutes) Language of assessment: German and/or English							
	other p	rerequi	sites	Prior o	completion of modu	les o8-PCM1a and o8	-PCM1b recommended.				
11-CSFM-Int-201-	Advand	ed Top	ics in Solid	State	Physics						
mo1	ECTS	6	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S	,[V (3) +	- R (1)	•		•			
				Modu	le taught in: English	1					
	Metho	d of ass	essment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c)							
				oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e)							
				If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the							
				form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed,							
				the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
				Language of assessment: English							
	other p	rerequi	sites	Approval from examination committee required.							
11-ASM-Int-201-	Metho	ds of Ot	servation	nal Astronomy							
m01	ECTS	6	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V (3) + R (1)							
				Module taught in: English							
	Metho	d of ass	essment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c)							
				oral ex	xamination in group	os (groups of 2, appro	x. 30 minutes per candidate) o	or d) project repo	ort (approx. 8 to 10 pages) or e)		
				presentation/talk (approx. 30 minutes).							
				form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed							
				the le	cturer must inform s	students about this b	y four weeks prior to the origina	al examination of	date at the latest.		
				Asses	sment offered: In th	e semester in which	the course is offered and in the	e subsequent se	emester		
				Langu	age of assessment:	English					

11-TPE-Int-201-m01	Experi	mental F	Particle Pl	hysics								
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	25		V (3) +	- R (1)							
				Modu	Module taught in: English							
	Metho	d of ass	essment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c)								
				oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or pre-								
				sentation/talk (approx. 30 minutes).								
				form o	of an oral examination	on of one candidate e	each or an oral examination in g	groups. If the m	ethod of assessment is changed,			
				the le	cturer must inform s	tudents about this by	y four weeks prior to the origina	al examination of	date at the latest.			
				Asses	Assessment offered: In the semester in which the course is offered and in the subsequent semester							
			<u> </u>	Langu	age of assessment:	English						
11-ASP-Int-201-	Introdu	uction to	Space P	nysics			· · ·		· · · · · · · · · · · · · · · · · · ·			
11101	ECIS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	es		V (3) + K (1) Module taught in: English								
				Modu								
	Metho	d of asso	essment	oral examination in groups (groups of 2, approx, 30 minutes per candidate) or d) project report (approx, 8 to 10 pages) or e)								
				presentation/talk (approx. 30 minutes).								
				If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the								
				form o	form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed,							
				the le	the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
				Assessment onered: in the semester in which the course is onered and in the subsequent semester								
11-MAS-Int-201-	Multi-v	wavelen	gth Astro	nomv								
mo1	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	es		V (3) +		0 0	0					
				Modu	le taught in: English							
	Metho	d of ass	essment	a) wri	tten examination (ap	prox. 90 to 120 minu	ites) or b) oral examination of o	one candidate e	each (approx. 30 minutes) or c)			
				oral e	xamination in group	s (groups of 2, appro	x. 30 minutes per candidate) o	r d) project repo	ort (approx. 8 to 10 pages) or e)			
				prese	ntation/talk (approx	. 30 minutes).	d of according the thic may be a	annead and acc	ecoment may instead take the			
				form of	of an oral examination w	as chosen as method	a of assessment, this may be cl	roups If the m	ethod of assessment is changed			
				the le	cturer must inform s	tudents about this b	four weeks prior to the origina	al examination of	date at the latest.			
				Langu	age of assessment:	English	,					

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11-CSAM-Int-201-	Advanced Topics in Astrophysics											
m01	ECTS 6 Duration			n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Cours	ses		V (3) Modu	V (3) + R (1) Module taught in: English							
	Meth	od of a	ssessment	a) wri oral e prese If a w form the le Langu	1) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) bral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) bresentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. anguage of assessment: English							
	other	r prereq	uisites	Appro	oval from examination	on committee require	d.					
11-MRI-Int-201-	Adva	nced M	agnetic Res	sonanc	e Imaging							
m01	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Cours	ses		V (3) Modu	V (3) + R (1) Module taught in: English							
	Meth	od of a	ssessment	 a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English 								
11-SSC-Int-201-	Surfa	ice Scie	nce									
m01	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Cours	ses		V (3) + R (1) Module taught in: English								
	Meth	od of a	ssessment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English								

11-BIC-Int-201-m01	Basic I	Basic Imaging Concepts									
	ECTS	6	Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		V (3) + Modu	V (3) + R (1) Module taught in: English						
	Metho	d of asse	essment	a) writ oral e prese If a wr form o the le Langu	I) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) oresentation/talk (approx. 30 minutes). f a written examination was chosen as method of assessment, this may be changed and assessment may instead take the orm of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is change he lecturer must inform students about this by four weeks prior to the original examination date at the latest. anguage of assessment: English						
11-CAP-Int-201-	Conten	nporary	Astrophy	sics							
m01	ECTS	6	Duration	n	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		V (3) + Modu	V (3) + R (1) Module taught in: English						
	Metho	d of asse	essment	a) writ oral e prese If a wr form c the le Langu	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take th form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is chan the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English						
11-AAI-Int-201-m01	Advand	ced Astro	o Imaging	g							
	ECTS	6	Duration	n	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		V (3) + R (1) Module taught in: English							
	Metho	d of asse	essment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English							

11-CTA-Int-201-	Advan	ced Com	puter Ton	mography							
m01	ECTS	6	Duratior	1 I	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	25		V (3) + R (1) Module taught in: English							
	Metho	d of asse	ssment	a) writ oral ex preser If a wr form c the leo Langu	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.						
11-EIM-Int-201-	Electro	on and lo	n Micros	сору				-			
m01	ECTS	6	Duratior	า	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			V (3) + Modu	· R (1) le taught in: English						
	Method of assessment			a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
11-SPT-Int-201-	Scanning Probe Technologies										
m01	ECTS 6 Duratio			า	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	es		V (3) + R (1) Module taught in: English							
	Method of assessment			a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English							
11-FPA-Int-201-m01	Visitin	g Resear	ch								
	ECTS	10	Duratior	า		Method of grading	numerical grade	Modul level	graduate		
	Course	es		R (o) Module taught in: English							
	Method of assessment			projec Langu	t report (10 to 20 pa age of assessment:	ges) English					
	other prerequisites			Approval from examination committee required.							

Mactor's with a major Dhysics International (2027)		
Master s with i hajor Physics international (2024)	• generated 21-Jun-2024 • exam. reg. data record 88 J44 - - H 2024	page 13 / 36

Current	: Topics	in Experi	mental Physics								
ECTS	5	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
Courses	S		V (2) + Modu	V (2) + R (2) Module taught in: English							
Method	l of ass	essment	a) writ oral ex presen If a wr form c the leo Langu	y written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) oresentation/talk (approx. 30 minutes). f a written examination was chosen as method of assessment, this may be changed and assessment may instead take the orm of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, he lecturer must inform students about this by four weeks prior to the original examination date at the latest. .anguage of assessment: English							
other p	rerequi	sites	Appro	val from examinatio	on committee require	ed.					
Current	Topics	in Experi	imental	Physics				~			
ECTS	6	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
Courses	S		V (3) + R (1) Module taught in: English								
Method	Method of assessment			a) written examination (approx. 90 to 120 minutes) of b) or a examination of one candidate each (approx. 30 minutes) of c) or al examination in groups (groups of 2, approx. 30 minutes) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English							
other p	rerequi	sites	Approval from examination committee required.								
Current	Irrent Topics in Experimental Physics										
ECTS	7	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
Courses	S		V (3) + R (1) Module taught in: English								
Method	l of ass	essment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English								
-	Current ECTS Courses Method Current ECTS Courses Method Current ECTS Courses Method	Current Topics ECTS 5 Courses Method of ass other prerequi Current Topics ECTS 6 Courses Method of ass Method of ass Method of ass Other prerequi Current Topics ECTS 6 Courses Method of ass Other prerequi Current Topics ECTS 7 Courses Method of ass Method of ass Method of ass	Current Topics in Experi ECTS 5 Duratio Courses Method of assessment other prerequisites Image: Current Topics in Experi ECTS 6 Duratio Courses Method of assessment Method of assessment Image: Current Topics in Experi Courses Method of assessment Other prerequisites Image: Current Topics in Experi ECTS 7 Duratio Courses Method of assessment Method of assessment Image: Current Topics in Experi ECTS 7 Duratio Courses Method of assessment	Current Topics in ExperimentationECTS5DurationCoursesV (2) + ModuMethod of assessmenta) writionMethod of assessmenta) writionother prerequisitesApproCurrent Topics in ExperimentationECTS6DurationCoursesV (3) + ModuMethod of assessmenta) writionCoursesV (3) + ModuMethod of assessmenta) writionCoursesV (3) + ModuMethod of assessmenta) writionother prerequisitesApproCurrent Topics in ExperimentationCoursesIf a writionform continue the lead Languother prerequisitesApproCurrent Topics in ExperimentationCoursesCoursesV (3) + ModuMethod of assessmenta) writion coal expressionCoursesV (3) + ModuMethod of assessmenta) writionCoursesV (3) + ModuMethod of assessmenta) writionCoursesV (3) + ModuMethod of assessmenta) writionIf a writionform continue the lead LanguMethod of assessmenta) writionIf a writionform continue the lead LanguMethod of assessmenta) writionIf a writionform continue the lead LanguMethod of assessmenta) writionIf a writionform continue the lead LanguIf a writionform continue the	Current Topics in Experimental PhysicsECTS5Duration1 semesterCoursesV (2) + R (2) Module taught in: EnglishMethod of assessmenta) written examination in group presentation/talk (approx If a written examination w form of an oral examination the lecturer must inform esamination the lecturer must inform esaminationother prerequisitesApproval from examination I semesterCoursesV (3) + R (1) Module taught in: EnglishMethod of assessmenta) written examination in group presentation/talk (approx I semesterCoursesV (3) + R (1) Module taught in: EnglishMethod of assessmenta) written examination in group presentation/talk (approx If a written examination w form of an oral examination w form of an oral examination w form of an oral examination form of an oral examination form of an oral examination w form of an oral examination form of an oral examination w form of an oral examination the lecturer must inform es Language of assessment: other prerequisitesOther prerequisitesApproval from examination form of an oral examination 	Current Topics in Experimental Physics ECTS 5 Duration 1 semester Method of grading Courses V (2) + R (2) Module taught in: English Method of assessment a) written examination (approx. 90 to 120 min oral examination in groups (groups of 2, appropresentation/talk (approx. 30 minutes). If a written examination was chosen as metho form of an oral examination of one candidate the lecturer must inform students about this b Language of assessment: English other prerequisites Approval from examination committee require Current Topics in Experimental Physics ECTS 6 Duration Courses V (3) + R (1) Module taught in: English Method of assessment a) written examination (approx. 90 to 120 min oral examination in groups (groups of 2, approx presentation/talk (approx. 30 minutes). If a written examination in groups (groups of 2, approx presentation/talk (approx. 30 minutes). If a written examination was chosen as metho form of an oral examination was chosen as metho form of an oral examination of one candidate the lecturer must inform students about this b Language of assessment: English other prerequisites Approval from examination committee require Current Topics in Experimental Physics ECTS ECTS 7 Duration 1 semester Method of grading<	ECTS 5 Duration 1 semester Method of grading numerical grade Courses V (2) + R (2) Module taught in: English Method of assessment a) written examination (approx. 90 to 120 minutes) or b) oral examination of oral examination in groups (groups of 2, approx. 30 minutes per candidate) or presentation/talk (approx. 30 minutes). If a written examination of one candidate each or an oral examination in groups (groups of 2, approx. 30 minutes) per candidate) or presentation/talk (approx. 30 minutes). other prerequisites Approval from examination committee required. Current Topics in Experimental Physics ECTS 6 Duration Courses V (3) + R (1) Module taught in: English Method of assessment a) written examination (approx. 90 to 120 minutes) or b) oral examination of or a real examination in groups (groups of 2, approx.) or b) oral examination of oral examination in groups (groups of 2, approx.) or b) oral examination of oral examination in groups (groups of 2, approx.) or b) oral examination of oral examination in groups (groups of 2, approx.) or b) oral examination in groups (for of an oral examination of a sessesment, this may be c). If a written examination was chosen as method of assessment, this may be c) form of an oral examination of one candidate each or an oral examination in groups (for a candidate each or an oral examination in groups (for a candidate each or an oral examination in groups (for a candidate each or an oral examination ingroups (for a candidate	ECTS 5 Duration 1 semester Method of grading numerical grade Modul level Courses V (2) + R (2) Module taught in: English Method of assessment a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate or oral examination in groups, (groups of 2, approx. 30 minutes) creation/talk (approx. 30 minutes). If a written examination on groups (groups of 2, approx. 30 minutes) creating the examination in groups. If the mittee examination of one candidate each or an oral examination in groups. If the mittee equired. Current Topics in Experimental Physics ECTS 6 Duration 1 semester Method of grading numerical grade Modul level Courses V (3) + R (1) Module taught in: English Method of grading numerical grade Modul level Courses V (3) + R (1) Module taught in: English Modul level Modul level Courses V (3) + R (1) Module taught in: English Modul level Modul level Courses V (3) + R (1) Module taught in: English Method of assessment, this may be changed and asse form of an oral examination machine shout this by four weeks prior to the original examination or presentation/talk (approx. 30 minutes). If a written examination or oral examination or one candidate each or an oral examination in groups. If the mithe lecturer must inform s			

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11-EXE8-Int-201-	201- Current Topics in Experimental Physics											
m01	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	!S		V (4) - Modu	/ (4) + R (2) Nodule taught in: English							
	Method of assessment			a) wri oral e prese If a wr form o the le Langu) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) oresentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the orm of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, he lecturer must inform students about this by four weeks prior to the original examination date at the latest. .anguage of assessment: English							
	other p	orerequi	sites	Appro	val from examinatio	on committee require	d.					
11-EXE6A-Int-201-	Curren	t Topics	in Experi	menta	l Physics							
m01	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V (3) - Modu	√ (3) + R (1) Module taught in: English							
	Method of assessment			a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English								
	other prerequisites		Approval from examination committee required.									
11-EXP6-Int-201-	Curren	t Topics	in Physic	:5				-				
m01	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V (3) + R (1)								
	Method of assessment			a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English								
	other prerequisites			Appro	oval from examination	on committee require	d.					

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Theoretical Physics	eoretical Physics (10 ECTS credits)										
11-QM2-Int-201-	Quanti	um Mec	hanics II	ics II							
m01	ECTS	8	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Course	es		V (4) -	+ R (2)						
				Module taught in: English							
	Method of assessment			a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English							
11-TQO-Int-221-	Theore	etical Qu	uantum O	ptics							
m01	ECTS 8 Duratio			n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			V (4) + R (2) Module taught in: English							
	Metho	d of ass	essment	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral amination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presents on/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take t form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is chan the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English					(approx. 30 minutes) or oral ex- ox. 8 to 10 pages) or presentati- sessment may instead take the ethod of assessment is changed, date at the latest. emester		
11-RTT-Int-201-m01	Theory	of Rela	tivity								
	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			V (3) + R (1) Module taught in: English							
	Method of assessment		a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester								

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11-RMFT-Int-201-	Renormalization Group Methods in Field Theory											
m01	ECTS	8	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Cour	ses		V (4) ·	+ R (2)	•		•				
				Modu	ile taught in: Englisi	1						
	Meth	iod of as	ssessment	a) wri oral e prese If a w form the le Langu Asses	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: Once a year as announced							
11-PKS-Int-201-	Phys	ics of Co	omplex Svs	tems			4					
m01	ECTS	6	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Cour	ses		V (2) Modu	+ R (2) Ile taught in: Englisi	<u>י כי</u> ו		1				
	Meth	od of as	ssessment	a) wri oral e prese If a w form o the le Langu Asses	tten examination (a examination in group ntation/talk (appro ritten examination v of an oral examinati ecturer must inform uage of assessment ssment offered: In th	pprox. 90 to 120 minu os (groups of 2, appro x. 30 minutes). vas chosen as method on of one candidate e students about this by : English ne semester in which	utes) or b) oral examination of 6 x. 30 minutes per candidate) o d of assessment, this may be c each or an oral examination in g y four weeks prior to the origina the course is offered and in the	one candidate e or d) project repo hanged and ass groups. If the m al examination o e subsequent se	each (approx. 30 minutes) or c) ort (approx. 8 to 10 pages) or e) essment may instead take the ethod of assessment is changed, date at the latest. mester			
11-QIC-Int-201-m01	Adva	nced Th	eory of Qua	antum	Computing and Qua	antum Information						
	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Cour	ses		V (3) + R (1) Module taught in: English								
	Meth	nod of as	ssessment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English								

11-TFK-Int-201-m01	1 Theoretical Solid State Physics											
	ECTS	8	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Cours	es		V (4)	+ R (2)							
				Modu	ile taught in: English	1						
	Metho	od of as	sessment	a) wr oral e prese If a w form the le Asse Lang	For a examination in groups (groups of 2, approx. 30 minutes) of b) of a candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). f a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester _anguage of assessment: English							
11-TFK2-Int-201-	Theor	etical S	olid State	Physic	:5 2							
m01	ECTS	8	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Cours	es		V (4) Modi	' (4) + R (2) Aodule taught in: English							
	Metho	od of as:	sessment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester								
11-TEFK-Int-201-	Topol	ogical E	ffects in S	olid St	ate Physics							
m01	ECTS	8	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Cours	es		V (4) Modi	+ R (2) ule taught in: English	ı						
	Metho	od of as	sessment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English								

11-FFK-Int-201-m01	I Field Theory in Solid State Physics												
	ECTS	8	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Cours	es		V (4)	+ R (2)	· · · · · ·		2					
				Modu	ile taught in: English	1							
	Metho	od of a	assessment	a) wri oral e prese If a w form the le Asses Lange	a) whiten examination (approx. 90 to 120 minutes) of b) or a examination of one candidate each (approx. 30 minutes) of c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) oresentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English								
11-AKTF-Int-201-	Selec	ted To	pics of Theo	retica	retical Solid State Physics								
m01	ECTS	6	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Cours	es		V (3) Modu	(3) + R (1) Iodule taught in: English								
	Metho	od of a	assessment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English									
11-CMS-Int-201-	Comp	utatio	onal Material	s Scie	nce (DFT)								
m01	ECTS	8	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Cours	es		V (4) Modu	+ R (2) Ile taught in: English	ı							
	Metho	od of a	assessment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester									

11-KFT-Int-201-m01	-201-m01 Conformal Field Theory											
	ECTS	6	Duratio	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	es		V (3) -	+ R (1)			•	·			
				Modu	le taught in: English							
	Metho	d of ass	essment	a) wri oral e prese If a wr form o the le Langu Asses	The lexamination in groups (groups of 2, approx. 30 minutes) or of oreal examination of one candidate each (approx. 30 minutes) or of ore presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. anguage of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester							
11-KFT2-Int-201-	Confo	mal Fiel	d Theory	2								
m01	ECTS	6	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	25	1	V (3) - Modu	(3) + R (1) Nodule taught in: English							
	Method of assessment			oral examination (approx. 90 to 120 minutes) of b) oral examination of one candidate each (approx. 30 minutes) of c) oral examination in groups (groups of 2, approx. 30 minutes) er candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester								
11-GRTM-Int-201-	Group	Theory										
m01	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	es		V (3) + R (1) Module taught in: English								
	Metho	d of ass	essment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester								
1	other	orerequi	sites	Appro	oval from examinatio	on committee require	d.					

11-CRP-Int-201-	Renormalization Group and Critical Phenomena											
m01	ECTS	6	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	25		V (3)	+ R (1)	•		- -				
				Modu	ule taught in: English	1						
	Metho	d of ass	sessment	a) wr oral e prese If a w form the le Lang	oral examination in groups (groups of 2, approx. 30 minutes) or 2)							
11-BWW-Int-201-	Bosonisation and Interactions in One Dimension											
mo1	ECTS	6	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	es		V (3) Modi	/ (3) + R (1) Module taught in: English							
	Method of assessment a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or b) oral examination of one candidate each (approx. 8 to 10 presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instea form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester											
11-GGD-Int-201-	Introd	uction t	o Gauge/G	Gravity	/ Duality							
m01	ECTS	8	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	es		V (4) Modu	+ R (2) ule taught in: English	ı						
	Metho	d of ass	sessment	a) wr oral e prese If a w form the le Lang Asse	itten examination (a examination in group entation/talk (approx ritten examination v of an oral examinati ecturer must inform s uage of assessment ssment offered: In th	pprox. 90 to 120 minu os (groups of 2, appro x. 30 minutes). vas chosen as method on of one candidate e students about this b : English ne semester in which	utes) or b) oral examination of c ix. 30 minutes per candidate) o d of assessment, this may be cl each or an oral examination in g y four weeks prior to the origina the course is offered and in the	one candidate e r d) project repo hanged and ass groups. If the m al examination o subsequent se	each (approx. 30 minutes) or c) ort (approx. 8 to 10 pages) or e) sessment may instead take the ethod of assessment is changed, date at the latest.			

11-AKM-Int-201-	Cosmology											
m01	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Cours	es		V (3) -	- F R (1)							
				Modu	le taught in: English	1						
	Metho	od of ass	sessment	a) wri oral e prese If a wr form o the le Langu Asses	oral examination in groups (groups of 2, approx. 30 minutes) of b) oral examination of one candidate catch (approx. 30 minutes) of c) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester							
11-AST-Int-201-	Theoretical Astrophysics											
m01	ECTS	CTS 6 Duratio			1 semester	Method of grading	numerical grade	Modul level	graduate			
	Cours	es		V (2) - Modu	V (2) + R (2) Module taught in: English							
	Metho	od of as:	sessment	a) wri oral e prese If a wi form o the le Langu Asses	oral examination in groups (groups of 2, approx. 30 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester							
11-EPP-Int-201-	Introd	luction t	o Plasma	Physic	S							
m01	ECTS	6	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Cours	es		V (2) · Modu	+ R (2) le taught in: English	l						
	Metho	od of ass	sessment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester								

11-APL-Int-201-	High-En	ergy A	strophysi	CS								
m01	ECTS	6	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	i		V (3) - Modu	⊦ R (1) le taught in: English			•				
	Method	of asso	essment	a) wri oral e prese If a wr form o the le Langu Asses) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) ral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) resentation/talk (approx. 30 minutes). a written examination was chosen as method of assessment, this may be changed and assessment may instead take the orm of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, ne lecturer must inform students about this by four weeks prior to the original examination date at the latest. anguage of assessment: English .ssessment offered: In the semester in which the course is offered and in the subsequent semester							
11-NMA-Int-201-	Comput	ationa	l Astrophy	/sics								
m01	ECTS	6	Duration	۱	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	i		V (3) - Modu	/ (3) + R (1) Module taught in: English							
	Method of assessment			oral examination (approx. 30 to 120 minutes) of b) oral examination of one candidate cath (approx. 30 minutes) of c) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester								
11-QFT1-Int-201-	Quantu	m Field	Theory I									
m01	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	i		V (4) + R (2) Module taught in: English								
	Method	of ass	essment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester								
	other pr	erequis	sites	Appro	ival from examinatio	on committee require	d.					

11-QFT2-Int-201-	Quantum Field Theory II											
m01	ECTS	8	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	es		V (4) ·	+ R (2)			-				
				Modu	le taught in: English	1						
	Metho	d of ass	sessment	a) wri oral e prese If a w form the le Langu	tten examination (a examination in group entation/talk (approx ritten examination w of an oral examination ecturer must inform s uage of assessment:	utes) or b) oral examination of c x. 30 minutes per candidate) of d of assessment, this may be ch each or an oral examination in g y four weeks prior to the origina the course is offered and in the	s) of b) of a examination of one candidate each (approx. 30 minutes) of c) 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) of assessment, this may be changed and assessment may instead take the ch or an oral examination in groups. If the method of assessment is changed our weeks prior to the original examination date at the latest.					
11-TEP-Int-201-m01	Assessment onered: in the semester in which the course is onered and in the subsequent semester											
11-121-11(-201-1101	FCTS	8	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	25	Durutio	V (/)	+ R (2)	method of grading	numencar grade	modulteret	3.44444			
				Modu	ile taught in: English	ı						
	Method of assessment a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may ir form of an oral examination of one candidate each or an oral examination in groups. If the method of assess the lecturer must inform students about this by four weeks prior to the original examination date at the lates Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester								each (approx. 30 minutes) or c) ort (approx. 8 to 10 pages) or e) sessment may instead take the ethod of assessment is changed, date at the latest.			
11-ATTP-Int-201-	Select	ed Topi	cs of Theo	oretical	Elementary Particle	e Physics						
m01	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	es		V (3) · Modu	+ R (1) Ile taught in: English	1						
	Metho	d of ass	sessment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester								

11-BSM-Int-201-	Models Beyond the Standard Model of Elementary Particle Physics										
m01	ECTS	6	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V (3) -	+ R (1)						
				Modu	le taught in: English	l					
	Methoo	d of ass	essment	a) wri oral e prese If a wr form o the le Langu Asses	ral examination in groups (groups of 2, approx. 30 minutes) or b) or a examination of one candidate each (approx. 30 minutes) or c) resentation/talk (approx. 30 minutes). a written examination was chosen as method of assessment, this may be changed and assessment may instead take the orm of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, ne lecturer must inform students about this by four weeks prior to the original examination date at the latest. anguage of assessment: English assessment offered: In the semester in which the course is offered and in the subsequent semester						
11-STRG1-Int-201-	String	Theory	1	1.0000							
mo1	ECTS	ECTS 8 Duratio			1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V (4) - Modu	+ R (2) le taught in: English				,-		
	Method of assessment a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidat oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and form of an oral examination of one candidate each or an oral examination in groups. If the the lecturer must inform students about this by four weeks prior to the original examinat Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequen-							ne candidate e r d) project repo nanged and ass groups. If the m al examination o	each (approx. 30 minutes) or c) ort (approx. 8 to 10 pages) or e) sessment may instead take the ethod of assessment is changed, date at the latest. emester		
11-STRG2-Int-201-	String	Theory	2								
m01	ECTS	6	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V (3) - Modu	+ R (1) le taught in: English	I					
	Methoo	d of ass	essment	a) wri oral e prese If a wi form o the le Langu Asses	tten examination (a xamination in group ntation/talk (approx ritten examination w of an oral examinatio cturer must inform s lage of assessment: sment offered: In th	pprox. 90 to 120 minu s (groups of 2, appro as chosen as method on of one candidate e students about this b English e semester in which	ites) or b) oral examination of c x. 30 minutes per candidate) or d of assessment, this may be ch each or an oral examination in g y four weeks prior to the origina the course is offered and in the	ne candidate e r d) project repo nanged and ass groups. If the m al examination o subsequent se	each (approx. 30 minutes) or c) ort (approx. 8 to 10 pages) or e) sessment may instead take the ethod of assessment is changed, date at the latest. emester		

11-RAI-Int-211-m01	Radio Astronomical Interferometry											
	ECTS 6	Durat	on	1 semester	Method of grading numerical grade	Modul level	graduate					
	Courses		V (3) Modu	+ R (1) Ile taught in: English	1							
	Method of	assessmen	t a) wri oral e prese If a w form the le Langu Asses	 i) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) oresentation/talk (approx. 30 minutes). f a written examination was chosen as method of assessment, this may be changed and assessment may instead take the orm of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, he lecturer must inform students about this by four weeks prior to the original examination date at the latest. anguage of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester 								
11-SLQ-Int-241-	Black Hole	es										
m01	ECTS 6	Durat	on	1 semester	Method of grading numerical grade	Modul level	graduate					
	Courses		V (3) Modu	/ (3) + R (1) Aodule taught in: English								
			b) ora c) ora d) pro e) pre If a w form the le Langu Asses	 a) written examination (approx. 90 to 120 minutes) of b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is change the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: In the semester in which the course is offered and in the following semester 								
11-TPSM-Int-211-	Particle Ph	nysics (Stan	dard Mo	del)								
11101	ECTS 8	Durat	on	1 semester	Method of grading numerical grade	Modul level	graduate					
	Courses		V (4) Modu	V (4) + R (2) Module taught in: English								
	Method of	assessmen	t a) wri oral e prese If a w form the le Langu Asses	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester Approval from examination committee required.								

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11-FPA-Int-201-m01	Visitin	g Reseai	rch								
	ECTS	10	Duratior	۱		Method of grading	numerical grade	Modul level	graduate		
	Course	!S		R (o) Modu	le taught in: English						
	Metho	d of asse	essment	project report (10 to 20 pages) Language of assessment: English							
	other p	rerequis	sites	Approval from examination committee required.							
11-EXT5-Int-201-	Curren	t Topics	of Theore	etical Physics							
m01	ECTS	5	Duratior	۱	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	!S		V (2) + Modu	V (2) + R (2) Module taught in: English						
	Method of assessment			oral examination (approx. 30 to 120 minutes) of b) oral examination of one candidate each (approx. 30 minutes) of c) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English							
	other p	prerequis	sites	Approval from examination committee required.							
11-EXT6-Int-201-	Curren	t Topics	of Theore	etical Physics							
m01	ECTS	6	Duration	ו	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	!S		V (3) + R (1) Module taught in: English							
	Method of assessment			a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English							
	other prerequisites			Approval from examination committee required.							

11-EXT7-Int-201-	Current	Topics	of Theore	etical	Physics							
m01	ECTS	7	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	;		V (3)	+ R (1)		•					
				Modu	ile taught in: English	1						
	Method	of ass	essment	a) wri oral e prese If a w form	itten examination (a examination in group entation/talk (appro ritten examination v of an oral examinati	pprox. 90 to 120 min os (groups of 2, approx. x. 30 minutes). vas chosen as metho ion of one candidate	utes) or b) oral examination of (ox. 30 minutes per candidate) o d of assessment, this may be c each or an oral examination in g	one candidate e or d) project repo hanged and ass groups. If the mo	ach (approx. 30 minutes) or c) ort (approx. 8 to 10 pages) or e) essment may instead take the ethod of assessment is changed,			
				the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English								
	other pr	rerequi	sites	Appro	Approval from examination committee required.							
11-EXT8-Int-201-	Current	Topics	of Theore	etical	Physics							
m01	ECTS	8	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	;	_	V (4) Modu	V (4) + R (2) Module taught in: English							
	method of assessment			oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English								
	other pr	rerequi	sites	Approval from examination committee required.								
11-EXT6A-Int-201-	Current	Topics	of Theore	etical	etical Physics							
m01	ECTS	6	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	5		V (3) + R (1) Module taught in: English								
	Method	of ass	essment	a) wr oral e prese If a w form the le Lange	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English							
1	j otner pr	erequi	SILES	INDD	uvat num examinatio	on committee require	:u.					

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11-EXP6A-Int-201-	Current Topics in Physics								
m01	ECTS 6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses		V (3) - Modu	V (3) + R (1) Module taught in: English					
	Method of ass	essment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English						
	other prerequi	sites	Appro	oval from examination	on committee require	d.			
Subfield Non-Phys	ical Minors								
10-M-OML-222-	Optimization	for Machi	ne Lear	ning					
m01	ECTS 10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate	
	Courses		V (4) - Modu	′ (4) + Ü (2) Aodule taught in: German and/or English					
	Method of ass	essment	a) written examination (approx. 90 to 180 minutes, usually chosen) or b) oral examination of one candidate each (15 to 30 minutes) or c) oral examination in groups (groups of 2, 10 to 15 minutes per candidate) Language of assessment: German and/or English Assessment offered: Only when announced in the semester in which the courses are offered and in the subsequent semester creditable for bonus						
10-M-VAN-222-	Advanced Ana	lysis							
m01	ECTS 10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate	
	Courses		V(4) + U(2)						
	Method of ass	essment	a) wri b) ora c) ora Langu credit	a) written examination (approx. 90 to 180 minutes, usually chosen) or b) oral examination of one candidate each (15 to 30 minutes) or c) oral examination in groups (groups of 2, 10 to 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus					
10-M=AAA-	Applied Analy	sis		i		· · · ·	1		
NIN-152-M01	ECTS 10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses		V (4) + U (2) Module taught in: English						
	Method of ass	essment	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English creditable for bonus						

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10-M=ADG-	Differential Geometry										
Min-152-m01	ECTS 1	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			V (4) - Modu	V (4) + Ü (2) Module taught in: English						
	Method o	of asso	essment	a) wri minut Asses Langu credit	tten examination (a es) or c) oral exami sment offered: In tl age of assessment able for bonus	pprox. 90 to 120 mini nation in groups (gro ne semester in which : English	utes, usually chosen) or ups of 2, 15 minutes per the course is offered and	b) oral examination of candidate) I in the subsequent se	one candidate each (approx. 20 mester		
10-M=AFT-	Complex	Analy	/sis								
Hin-152-m01	ECTS 1	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			V (4) - Modu	+ Ü (2) le taught in: Englis	h					
	Method o	of asso	essment	a) wri minut Asses Langu credit	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English creditable for bonus						
10-M=AL-	Lie Theo	ry									
THin-152-m01	ECTS 10 Duratio		n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V (4) + Ü (2) Module taught in: English							
	Method o	of asso	essment	a) wri minut Asses Langu credit	tten examination (a ces) or c) oral exami ssment offered: In tl lage of assessment able for bonus	pprox. 90 to 120 mini nation in groups (gro ne semester in which : English	utes, usually chosen) or ups of 2, 15 minutes per the course is offered and	b) oral examination of candidate) I in the subsequent se	one candidate each (approx. 20 mester		
10-M=ATO-	Topology	у									
Pin-152-m01	ECTS 1	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	Courses			V (4) + Ü (2) Module taught in: English						
	Method o	of asso	essment	a) wri minut Asses Langu credit	tten examination (a es) or c) oral exami sment offered: In tl lage of assessment able for bonus	pprox. 90 to 120 mini nation in groups (gro ne semester in which : English	utes, usually chosen) or ups of 2, 15 minutes per the course is offered and	b) oral examination of candidate) I in the subsequent se	one candidate each (approx. 20 mester		

10-M=AZTHin-152-	Numbe	r Theory	/									
m01	ECTS 10 Duration			1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S	-	V (4) - Modu	V (4) + Ü (2) Module taught in: English							
	Method	d of ass	essment	a) wri minut Asses Langu credit	tten examination (es) or c) oral exam sment offered: In t lage of assessmen able for bonus	approx. 90 to 120 mini ination in groups (grou he semester in which t: English	utes, usually chosen) or ups of 2, 15 minutes per the course is offered an	b) oral examination of candidate) d in the subsequent se	one candidate each (approx. 20 mester			
10-M=VGD-	Groups	Groups and their Representations										
Sin-152-m01	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V (4) - Modu	+ Ü (2) le taught in: Englis	sh						
	Methoo	d of ass	essment	a) wri minut Asses Langu credit	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: English creditable for bonus							
10-M=VGE-	Geometrical Mechanics											
Min-152-m01	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V (4) + Ü (2) Module taught in: English								
	Methoo	d of asso	essment	a) wri minut Asses Langu credit	tten examination (es) or c) oral exam sment offered: In t lage of assessmen able for bonus	approx. 90 to 120 mini ination in groups (grou he semester in which t: English	utes, usually chosen) or ups of 2, 15 minutes per the course is offered an	b) oral examination of candidate) d in the subsequent se	one candidate each (approx. 20 emester			
10-M=VN-	Numer	ic of Par	tial Differ	rential	Equations							
PEin-152-mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V (4) + Ü (2) Module taught in: English								
	Method of assessment			a) wri minut Asses Langu credit	tten examination (es) or c) oral exam sment offered: In t lage of assessmen able for bonus	approx. 90 to 120 mini ination in groups (grou he semester in which t: English	utes, usually chosen) or ups of 2, 15 minutes per the course is offered an	b) oral examination of candidate) d in the subsequent se	one candidate each (approx. 20 mester			

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10-M=VDI-	Discrete	Mathe	ematics								
Min-152-m01	ECTS 4	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			V (3) · Modu	V (3) + Ü (1) Module taught in: English						
	Method	of asse	essment	a) wri minut Asses Langu credit	tten examination (a ces) or c) oral exam ssment offered: In t lage of assessment able for bonus	approx. 60 to 90 minu ination in groups (gro he semester in which t: English	tes, usually chosen) o ups of 2, approx. 10 m the course is offered a	r b) oral examination of inutes per candidate) and in the subsequent so	one candidate each (approx. 15 emester		
10-M=VM-	Selected	l Topic	s in Math	emati	cal Physics						
PHin-152-m01	ECTS :	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			V (4) · Modu	+ Ü (2) le taught in: Englis	h		·			
	Method	of asse	essment	a) wri minut Asses Langu credit	tten examination (a tes) or c) oral exam sment offered: In t tage of assessment able for bonus	approx. 90 to 120 min ination in groups (gro he semester in which t: English	utes, usually chosen) (ups of 2, 15 minutes p the course is offered a	or b) oral examination of er candidate) and in the subsequent se	f one candidate each (approx. 20 emester		
10-M=VPD-	Partial Differential Equations of Mathematical Physics										
Pin-152-m01	ECTS 10 Duratio		Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			V (4) · Modu	V (4) + Ü (2) Module taught in: English						
	Method	of asse	essment	a) wri minut Asses Langu credit	tten examination (a tes) or c) oral exam ssment offered: In t lage of assessment able for bonus	approx. 90 to 120 min ination in groups (gro he semester in which t: English	utes, usually chosen) (ups of 2, 15 minutes p the course is offered a	or b) oral examination of er candidate) and in the subsequent so	f one candidate each (approx. 20 emester		
10-M=V-	Pseudo I	Riemaı	nnian and	l Riem	annian Geometry						
PRGin-152-mo1	ECTS :	10	Duratio	<u>1</u>	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			V (4) + Ü (2) Module taught in: English							
	Method of assessment			a) wri minut Asses Langu credit	tten examination (a es) or c) oral exam ssment offered: In t lage of assessment able for bonus	approx. 90 to 120 min ination in groups (gro he semester in which t: English	utes, usually chosen) (ups of 2, 15 minutes p the course is offered a	or b) oral examination of er candidate) and in the subsequent so	f one candidate each (approx. 20 emester		

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10-I=DB-161-m01	Datab	ases								
	ECTS	5	Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate		
	Cours	es		V (2) -	+ Ü (2)					
	Meth	od of ass	sessment	written examination (approx. 60 to 120 minutes).						
				lf ann	announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination					
				date).	e canuluale each (aj	pplox. 20 minutes) of an orac examination in groups	of 2 canuluates	approx. 15 minutes per candi-		
				Separ	ate written examina	ation for Master's students.				
				Langu credit	_anguage of assessment: German and/or English creditable for bonus					
	Addit	ional Inf	ormation	Focus	es available for stu	dents of the Master's programme Informatik (Compu	uter Science, 120	ECTS credits): SE, IS, HCI, GE.		
10-l=QC-221-m01	Quan	tum Con	municatio	ons						
	ECTS	5	Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate		
	Cours	es		V (2) - Modu	/ (2) + V (2) Nodule taught in: English					
	Meth	od of ass	sessment	written examination (approx. 60 to 120 minutes).						
				If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx, approx) or an oral examination in groups of a candidates (approx, approx) or an oral examination in groups of a candidates (approx, approx) or an oral examination in groups of a candidates (approx) or an oral examination or an oral examination in groups of a candidates (approx) or an oral examination or						
				date).	e canuluale each (aj	pplox. 20 minutes) of an oral examination in groups		approx. 15 minutes per candi-		
				Langu credit	Language of assessment: English creditable for bonus					
	Additional Information			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): LR						
10-I-RAK-152-m01	Comp	uter Arc	hitecture	re						
	ECTS	5	Duratio	n	1 semester	Method of grading numerical grade	Modul level	undergraduate		
	Cours	es		V (2) -	+ Ü (2)					
	Meth	od of ass	sessment	writte	n examination (app	rox. 60 to 120 minutes).				
				If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination						
				date).						
				Language of assessment: German and/or English creditable for bonus						
	Referred to in LPO I			§ 22 II Nr. 3 b) § 69 I Nr. 1 c): Rechnerarchitektur						

10-I-APR-172-m01	Advanc	ed Prog	gramming	5						
	ECTS	5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate	
	Course	S	_	V (2) +	/ (2) + Ü (2)					
	Method	d of ass	essment	writte	n examination (app	prox. 60 to 120 minute	es).			
				lf ann	ounced by the lect	urer at the beginning	of the course, the written exan	nination may be	replaced by an oral examination	
				of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candi-						
				Langu	age of assessment	: German and/or Eng	lish			
				credit	able for bonus					
10-l-BS-191-m01	Operat	ing Sys	tems			1				
	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate	
	Course	S		V (2) + Modu	V (2) + Ü (2) Module taught in: English					
	Method	d of ass	essment	writte	n examination (app	prox. 60 to 120 minute	es).	_		
				lf ann	ounced by the lect	urer at the beginning	of the course, the written exan	nination may be	replaced by an oral examination	
				date).	date).					
				Language of assessment: German and/or English						
				credit	able for bonus					
10-l=Kl1-212-m01	Artifici	al Intell	igence 1			- 1				
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Course	S		V (2) +	- Ü (2)					
	Method	d of ass	essment	written examination (approx. 60 to 120 minutes).						
				It announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, ac minutes) or an oral examination in groups of a candidates (approx, a						
				date).				s of z candidate.	approx. 13 minutes per candi	
				credit	able for bonus					
				Langu	Language of assessment: German and/or English					
	Additio	onal Info	rmation	Focus	es available for stu	idents of the Master's	programme Informatik (Comp	outer Science, 120	o ECTS credits): AT,SE,KI,HCI	
08-FU-SAM-161-	Sensor	and Ac	tor Mater	ials - F	unctional Ceramics	and Magnetic Partic	les			
11101	ECTS	5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Course	S		V (2) +	- P (2)					
	Method of assessment			a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral ex-						
				amina Asses	sment offered. On	re a vear summer ser	ninutes per candidate) nester			
				Langu	age of assessment	t: German and/or Eng	lish			
				P: cre	ditable for bonus					

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08-FU-EEW-222-	Electrochem	nical Energy	Storage and Conversion								
m01	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses	, , , , , , , , , , , , , , , , , , ,	V (2) Modu	+ S (2) Ile taught in: Germa	n or English						
	Method of a	ssessment	a) wri b) tal Langi Asses	a) written examination (approx. 90 minutes) or oral examination of one candidate each (approx. 30 minutes) and b) talk (approx. 30 minutes); (weighted 65:35) Language of assessment: German and/or English Assessment offered: Once a year, summer semester							
08-FU-MW-222-	Structure-P	tructure-Properties Correlations of Light Materials - Experiments and Numerical Simulations									
m01	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		V (2) Modu	V (2) + S (2) Module taught in: German or English							
	Method of a	ssessment	a) wri b) tal Langu Asses	a) written examination (approx. 90 minutes) or oral examination of one candidate each (approx. 30 minutes) and b) talk (approx. 30 minutes); (weighted 60:40) Language of assessment: German and/or English Assessment offered: Once a year, summer semester							
11-EXNP6-Int-201-	Nonphysica	l Minor Sub	ject								
m01	ECTS 6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		V (3) + R (1) Module taught in: English								
	Method of a	ssessment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English								
	other prerec	quisites	Approval from examination committee required.								
Master Project Mod	dules (60 ECT	'S credits)									
11-FS-P-Int-201-	Professiona	l Specializa	tion Physics International								
m01	ECTS 15 Duratio		n	1 semester	Method of grading	(not) successfully completed	Modul level	graduate			
	Courses		S (4) Module taught in: English								
	Method of a	ssessment	talk with discussion (30 to 45 minutes) Language of assessment: English								

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11-MP-P-Int-201-	Scientific Methods and Project Management Physics International									
m01	ECTS 15 Duration		n	1 semester	Method of grading	(not) successfully completed	Modul level	graduate		
	Courses			R (4) Module taught in: English						
	Method of assessment L			talk with discussion (30 to 45 minutes) Language of assessment: English						
11-MA-P-Int-201-	Master Thesis Physics International									
m01	ECTS	ECTS 30 Duration		n	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses									
	Method of assessment Ma			Maste Langu	Master's thesis (750 to 900 hours total) Language of assessment: English					
	Additional Information			Time to complete: 6 months						