TRANSCRIPT

1 (7)

Herranen Joonas Lauri Jooseppi Abraham Wetterin tie 14 C 37 00880 HELSINKI 014038411 Date of enrolment

21.07.2020

01.07.1992 01.08.2011

Grade Language Date

PRIMARY STUDY RIGHT

Degree objective Doctor of Philosophy (science)

Decree Government Decree (794/2004) on University Degrees

Degree programme Doctoral Programme in Particle Physics and Universe Sciences

Valid: 22.06.2016 - Date of 22.06.2016

commencement

DEGREES AND UPGRADING OF QUALIFICATIONS

00335	Master of Science (science)	Cr 141,00	Date 22.06.2016
00345	Bachelor of Science	Cr 181,00	Date 28.08.2015

COMPLETED CREDITS

Course

Course			CI.	Grade	Lunguage	Dute
H528	Department of Physics					
00335	Master of Science (science)		141,00	Pass		22.06.2016
50034	MSc Other Studies		23,00	Pass		19.05.2016
530150	Individual study plan (Master's Derg	gee)	1,00	Pass	Finnish	19.05.2016
530218	Major Physics Teachers' Laboratory Course II		5,00	4	Finnish	10.05.2016
530235	Major PhysicsTeachers' Laboratory Course I		5,00	5	Finnish	06.01.2015
53336	Structure of Matter I		8,00	2	Finnish	08.05.2013
53364	Orientation to Physics Education		2,00	Pass	Finnish	31.12.2013
53776	Special Course in Theoretical Physic	cs	2,00	Pass	Finnish	28.05.2015
	Kosmologian kesäkoulu, 2528.5.20)15				
530125	Physics, Intermediate Studies (Minor))	35,00	4		10.03.2016
530141	Electronics I		5,00	3	Finnish	11.12.2013
530144	Physics' Intermediate Studies Labora Exercises I	atory	5,00	4	Finnish	24.04.2015
53058	Materials Physics I		5,00	4	Finnish	30.10.2015
53319	Special Course in Physics		5,00	4	Finnish	10.03.2016
	Kiinteän aineen jatkumomekaniikka	Į.				
53379	Measurement Methods in Physics I		5,00	3	Finnish	12.12.2013
53697	Fluid Phenomena		5,00	5	English	16.12.2015
53749	Basics of Continuum Mechanics		5,00	3	Finnish	02.05.2014
53729	Theoretical Physics, Advanced Studie	2S	83,00	4		30.05.2016
50039	Maturity Test in Finnish MSc		0,00	Pass	Finnish	23.05.2016

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Herranen Joonas Lauri Jooseppi

014038411

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COMPLETED CREDITS

Course		Cr	Grade	Languag	e Date
530301	MSc seminar in physics and theoretical physics	3,00	Pass	Finnish	28.04.2016
53369	Scientific Computing III	10,00	3	English	31.05.2015
53713	Mathematical Methods of Physics III	10,00	5	Finnish	10.12.2015
53717	Quantum Mechanics II	10,00	3	English	28.04.2015
53765	Plasma Physics	5,00	3	Finnish	21.10.2014
53919	Electromagnetic Scattering I	5,00	5	Finnish	28.08.2015
50114	Master's Thesis in Theoretical Physics	40,00	L	Finnish	30.05.2016
	Tähtienvälisen pölyn dynamiikkaa sähkön säteilykentässä	magneettisessa			
00345	Bachelor of Science	181,00	Pass		28.08.2015
50042	BSc other Studies	32,00	Pass		30.04.2015
50099	Tutortraining and Tutoring	2,00	Pass	Finnish	04.10.2013
53001	Introduction to Physical Sciences	3,00	Pass	Finnish	31.12.2012
530147	Individual Study Plan (Bachelor's Degree)	1,00	Pass	Finnish	05.03.2015
530148	ICT-Driving Licence, Information Technology Skills	3,00	Pass	Finnish	11.09.2012
530168	Mother Tongue	3,00	Pass	Finnish	30.04.2015
53398	Scientific Computing I	5,00	5	Finnish	04.03.2013
53905	Universe Now	3,00	3	Finnish	24.10.2012
992911	Oral Skills in the Second Official Language, Swedish	2,00	G	Swedish	28.02.2013
992912	Written Skills in the Second Official Language, Swedish	1,00	SAT	Swedish	28.02.2013
99299	Japanese for beginners 1	5,00	Pass	Japanese	10.05.2013
99501Mat-l	English Academic & Professional Skills:	4,00	Pass	English	19.06.2013
u	Reading, Writing & Spoken Communication (CEFR B2)*				
530133	Physics, Basic Studies (Minor)	25,00	4		03.06.2013
530140	Laboratory Exercises in Basic Studies	5,00	4	Finnish	03.06.2013
530281	Interactions and Bodies	5,00	4	Finnish	22.10.2012
530282	Matter and Interactions	5,00	4	Finnish	18.12.2012
530283	Electromagnetism	5,00	5	Finnish	05.03.2013
530284	Radiation Fields and Photons	5,00	5	Finnish	08.05.2013
53708	Theoretical Physics, Basic Studies	25,00	5		22.05.2014
530000	Fundamentals of Theory of Relativity	4,00	3	Finnish	06.03.2013
53703	Basics of Quantum Physics	5,00	4	Finnish	12.06.2013
53704	Mathematics for Physicists I	8,00	5	Finnish	23.10.2012
53705	Mathematics for Physicists II	8,00	5	Finnish	22.05.2014
53748	Theoretical Physics, Intermediate Studies	74,00	4		05.05.2015
50036	Maturity Test in Finnish BSc	0,00	Pass	Finnish	28.04.2015
53014	Thermal Physics	8,00	2	Finnish	12.12.2013
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COMPLETED CREDITS

53399 Scientific Computing II 5,00 5 English 18.12.2013 537004 Statistical mechanics 5,00 1 Finnish 02.03.2015 537005 Quantum statistics 5,00 3 Finnish 05.05.2015 537010 Analytical Mechanics 5,00 3 Finnish 23.10.2013 537011 Electrodynamics I 5,00 2 Finnish 03.03.2014 537012 Electrodynamics II 5,00 5 Finnish 05.05.2014 53716 Quantum Mechanics I 10,00 4 Finnish 09.12.2014 53723 Mathematical Methods of Physics Ia 5,00 3 Finnish 31.10.2013 53724 Mathematical Methods of Physics Ib 5,00 5 Finnish 19.12.2013 53725 Mathematical Methods of Physics IIa 5,00 5 Finnish 28.04.2014 53726 Mathematical Methods of Physics IIb 5,00 4 Finnish 31.05.2014
537004 Statistical mechanics 5,00 1 Finnish 02.03.2015 537005 Quantum statistics 5,00 3 Finnish 05.05.2015 537010 Analytical Mechanics 5,00 3 Finnish 23.10.2013 537011 Electrodynamics I 5,00 2 Finnish 03.03.2014 537012 Electrodynamics II 5,00 5 Finnish 05.05.2014 53716 Quantum Mechanics I 10,00 4 Finnish 09.12.2014 53723 Mathematical Methods of Physics Ia 5,00 3 Finnish 31.10.2013 53724 Mathematical Methods of Physics Ib 5,00 5 Finnish 19.12.2013 53725 Mathematical Methods of Physics IIa 5,00 5 Finnish 28.04.2014
537010 Analytical Mechanics 5,00 3 Finnish 23.10.2013 537011 Electrodynamics I 5,00 2 Finnish 03.03.2014 537012 Electrodynamics II 5,00 5 Finnish 05.05.2014 53716 Quantum Mechanics I 10,00 4 Finnish 09.12.2014 53723 Mathematical Methods of Physics Ia 5,00 3 Finnish 31.10.2013 53724 Mathematical Methods of Physics Ib 5,00 5 Finnish 19.12.2013 53725 Mathematical Methods of Physics IIa 5,00 5 Finnish 28.04.2014
537011 Electrodynamics I 5,00 2 Finnish 03.03.2014 537012 Electrodynamics II 5,00 5 Finnish 05.05.2014 53716 Quantum Mechanics I 10,00 4 Finnish 09.12.2014 53723 Mathematical Methods of Physics Ia 5,00 3 Finnish 31.10.2013 53724 Mathematical Methods of Physics Ib 5,00 5 Finnish 19.12.2013 53725 Mathematical Methods of Physics IIa 5,00 5 Finnish 28.04.2014
537012 Electrodynamics II 5,00 5 Finnish 05.05.2014 53716 Quantum Mechanics I 10,00 4 Finnish 09.12.2014 53723 Mathematical Methods of Physics Ia 5,00 3 Finnish 31.10.2013 53724 Mathematical Methods of Physics Ib 5,00 5 Finnish 19.12.2013 53725 Mathematical Methods of Physics IIa 5,00 5 Finnish 28.04.2014
53716 Quantum Mechanics I 10,00 4 Finnish 09.12.2014 53723 Mathematical Methods of Physics Ia 5,00 3 Finnish 31.10.2013 53724 Mathematical Methods of Physics Ib 5,00 5 Finnish 19.12.2013 53725 Mathematical Methods of Physics IIa 5,00 5 Finnish 28.04.2014
53723Mathematical Methods of Physics Ia5,003Finnish31.10.201353724Mathematical Methods of Physics Ib5,005Finnish19.12.201353725Mathematical Methods of Physics IIa5,005Finnish28.04.2014
53724 Mathematical Methods of Physics Ib 5,00 5 Finnish 19.12.2013 53725 Mathematical Methods of Physics IIa 5,00 5 Finnish 28.04.2014
53725 Mathematical Methods of Physics IIa 5,00 5 Finnish 28.04.2014
53726 Mathematical Methods of Dhysics IIh 5 00 1 Finnish 21 05 2011
53740 Bachelor's Thesis 6,00 5 Finnish 28.04.2015
Vedyn spektri algebrallisin menetelmin
57500 Mathematics, Basic Studies 25,00 5 22.10.2013
57016 Analysis I 10,00 5 Finnish 15.12.2012
57020 Topology I 10,00 4 Finnish 19.05.2013
57045 Introduction to Probability 5,00 5 Finnish 22.10.2013
Course Cr Grade Language Date
Unincomposated studies
Unincorporated studies
HE16 Description of Mathematics and Statistics
H516 Department of Mathematics and Statistics
Mathematics, Intermediate Studies (Minor) 35,00 4 18.10.2015
57014 Algebra I 10,00 2 Finnish 18.05.2014
57017 Analysis II 10,00 5 Finnish 19.05.2013
57043 Linear Algebra and Matrices I 5,00 5 Finnish 21.10.2012
57047 Linear Algebra and Matrices II 5,00 4 Finnish 16.12.2012
57121 Vector analysis I 5,00 4 Finnish 18.10.2015
57044 Differential Equations I 5,00 4 Finnish 15.06.2016
57048 Differential Equations II 5,00 1 Finnish 15.06.2016
57101 Measure and Integral 6,00 1 Finnish 20.06.2016
57160 Introduction to Logics I 5,00 5 English 17.06.2016
H523 Department of Computer Science
584112 Computer Science, Basic Studies (minor) 25,00 5 21.12.2018
TKT10001 Introduction to Computer Science 5,00 5 Finnish 21.12.2018 TKT10004 Introduction to Databases 5,00 5 Finnish 23.10.2017
TKT20002 Methods for Software Engineering 5,00 4 Finnish 11.05.2018
581325 Introduction to Programming 5,00 5 Finnish 16.10.2012
582103 Advanced Course in Programming 4,00 5 Finnish 10.12.2012
582350 Programming Challenges I 1,00 Pass Finnish 23.08.2017

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21.07.2020

Herranen Joonas Lauri Jooseppi

014038411

01.07.1992

COMPLETED CREDITS

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Course		Cr	Grade	Language	e Date
584214	Computer Science, Intermediate Studies (minor)	39,00	4		08.03.2018
TKT10005	Computer Organization I	5,00	4	Finnish	20.12.2017
TKT20004	Introduction to Data Communication	5,00	3	Finnish	24.10.2017
TKT20006	Software Engineering	6,00	5	Finnish	19.12.2017
TKT20011	Intermediate Studies Project: Database Application	4,00	5	Finnish	08.03.2018
TKT21007	Server-side Web Development Java	5,00	5	Finnish	20.12.2017
TKT21015	Version Control	1,00	Pass	Finnish	19.12.2017
58131	Datastructures and Algorithms	9,00	3	Finnish	20.12.2016
AY5823951	Open uni: Cyber Security Base: Introduction to Cyber Security	1,00	Pass	English	13.11.2017
AY5823952	Open uni: Cyber Security Base: Securing Software	3,00	Pass	English	18.12.2017
	Software				
H5293	Laboratory of Physical Chemistry				
55422	Structure of Atoms and Molecules	5,00	4	Finnish	16.04.2014
H5299	Teacher Education Unit				
55113	Chemistry, Basic Studies (Teacher, Minor)	25,00	4		29.04.2014
55003	Introduction to chemistry education(minor subject chemistry,teacher)	3,00	4	Finnish	20.12.2013
55004	Chemistry in environment	4,00	3	Finnish	29.04.2014
55015	Safety in the Laboratory	1,00	Pass	Finnish	13.08.2013
55310	Intermediate inorganic chemistry laboratory IA	3,00	Pass	Finnish	23.10.2013
55311	Intermediate inorganic chemistry laboratory IB	3,00	Pass	Finnish	23.10.2013
55314	General chemistry I	4,00	5	Finnish	20.09.2013
55315	General chemistry II	4,00	5	Finnish	20.09.2013
55521	Organic Chemistry I	3,00	1	Finnish	27.02.2014
H923	Doctoral school in natural sciences				
DONAS-997	General Competence Studies	10,00	Pass		13.04.2019
DONAS-107	Project management and leadership	2,00	Pass	English	13.04.2018
DONAS-201	International conference participation 1	1,00	Pass	English	24.03.2017
DONAS-201	ELS-XVI, College Park, Maryland, 2024.3.		F d 5 5	Eligiisii	24.05.2017
DONAS-202	International conference participation 2	1,00	Pass	English	09.03.2018
DOI 11 10 202	ELS-XVII/LIP2018, Texas, College Station,		1 033	Liigiisii	05.05.2010
DONAS-203	Scientific work abroad 1	1,00	Pass	English	13.04.2019
2011/10-203	Research visit 1.313.4.2019. Madison, Wisc		1 433	111511311	10.07.2013
PED511	YP 1 Oppiminen yliopistossa	5,00	5	Finnish	30.10.2017

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COMPLETED CREDITS

Course		Cr	Grade	Language	Date
500-K003	Bachelor's Programme in Chemistry				
		17.50	4		15 01 2010
55116	Chemistry, Intermediate Studies (Teacher, Minor)	17,50	4		15.01.2018
MFK-K203	Chemical Concepts and Phenomena in Teaching	5,00	5	Finnish	15.12.2017
MFK-K302	Modeling and Visualization of Chemistry	5,00	5	Finnish	21.12.2017
55058	Basic laboratory work in chemistry II	3,00	4	Finnish	02.06.2017
55066	Organic chemistry labworks I	4,00	Pass	Finnish	15.01.2018
55069	Structure and spectroscopy of molecules	5,00	5	Finnish	17.11.2016
55111	Inquiry-based chemistry teaching I	5,00	4	Finnish	23.12.2016
55324	Analytical Chemistry	5,00	1	Finnish	30.05.2014
55508	Biological chemistry	3,00	1	Finnish	28.04.2014
500-K004	Bachelor's Programme for Teachers of Math	nematics, Phys	sics and	Chemistry	
55116	Chemistry, Intermediate Studies (Teacher, Minor)	17,50	4		15.01.2018
MFK-K203	Chemical Concepts and Phenomena in Teaching	5,00	5	Finnish	15.12.2017
MFK-K302	Modeling and Visualization of Chemistry	5,00	5	Finnish	21.12.2017
55058	Basic laboratory work in chemistry II	3,00	4	Finnish	02.06.2017
55066	Organic chemistry labworks I	4,00	Pass	Finnish	15.01.2018
55069	Structure and spectroscopy of molecules	5,00	5	Finnish	17.11.2016
55111	Inquiry-based chemistry teaching I	5,00	4	Finnish	23.12.2016
55324	Analytical Chemistry	5,00	1	Finnish	30.05.2014
55508	Biological chemistry	3,00	1	Finnish	28.04.2014
525	Astronomy				
53861	Basics of Astronomy I	5,00	4	Finnish	20.12.2012
53862	Basics of Astronomy II	5,00	4	Finnish	04.03.2013
52810	Physics				
530006	Basics of Monte Carlo Simulations	5,00	3	English	03.03.2016
52811	Theoretical Physics				
53776	Special Course in Theoretical Physics Introduction to Quantum Gravity	1,00	Pass	English	27.05.2016
6201	Subject teacher education				
68600	Education Subject Studies (Cum Laude Approbatur) Pedagogical Studies for Teachers	60,00	3		12.05.2016
68199	Education, Pedagogical Studies for Teachers, Basic Studies in Education	25,00	3		14.12.2015
6206205	Facing specificity and multiplicity	6,00	3		16.10.2015

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21.07.2020

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014038411 01.07.1992

COMPLETED CREDITS

Course			Cr	Grade	Language	e Date
62062051	Special education		2,00	3	Finnish	15.10.2015
62062052	Multicultural education		2,00	3	Finnish	16.10.2015
62062053	Education for Diversities, Groups		2,00	Pass	Finnish	12.10.2015
68152	Basic practice		7,00	Pass	Finnish	14.12.2015
68251	Introduction to subject teaching		9,00	4		04.12.2015
681364	Observation Course in Teaching		1,00	Pass	Finnish	21.09.2015
68137	Introduction to General Didactics		1,00	4	Finnish	07.09.2015
68149	Subject-Specific Didactics, Lecture	S	2,00	4	Finnish	12.11.2015
68153Fys	Subject-Specific Didaktics, grupp		2,00	5	Finnish	16.11.2015
68153Mat	Subject-Specific Didaktics, grupp		2,00	4	Finnish	03.11.2015
68325	Self Estimation I		1,00	Pass	Finnish	04.12.2015
68104	Psychology of development and learn	ning	2,00	1	Finnish	20.11.2015
68121	Interactional Skills I		1,00	Pass	Finnish	05.10.2015
68299	Education, Pedagogical Studies for Teachers, Intermediate Studies in Education		35,00	3		12.05.2016
68129	Evaluation and development of teach	ing	8,00	4		20.04.2016
68150	Subject-Specific Didactics, Lecture	_	2,00	1	Finnish	24.03.2016
68158Fys	Subject-Specific Didaktics, grupp		2,50	4	Finnish	29.03.2016
68158Mat	Subject-Specific Didaktics, grupp		2,50	5	Finnish	17.03.2016
68332	Self Estimation II		1,00	Pass	Finnish	20.04.2016
68162	Subject didactics 4		10,00	2		18.04.2016
68166	Seminar		7,00	2		18.04.2016
68206	Seminar I		3,00	Pass	Finnish	31.12.2015
68207	Seminar II		4,00	2	Finnish	18.04.2016
6206206	Introduction to educational research	1	3,00	3	Finnish	16.10.2015
68362	Teaching Practice		9,00	Pass	Finnish	06.05.2016
6206204	Social, Historical and Philosophical Foundations of Education, lectures a exam	nd	3,00	2	Finnish	26.02.2016
681278	Social, historical and philosophical b of education, group	asis	1,00	Pass	Finnish	19.02.2016
68326	Applied practice		4,00	Pass	Finnish	12.05.2016
7923101	Doctoral Programme in Particle Phys	ics and Univ	erse Sci	ences		
PAPU-998	Discipline-Specific Studies		32,00	5		13.05.2019
DONAS-401	Research Ethics		1,00	Pass	English	31.10.2018
PAPU-001	PAPU Doctoral Student Seminar		3,00	Pass	English	13.05.2019
53728	Advanced Course in Statistical Physic	S	10,00	5	English	21.06.2017
53830	Seminar in Astronomy		3,00	Pass	English	19.05.2017

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21.07.2020

Herranen Joonas Lauri Jooseppi 014038411 01.07.1992

COMPLETED CREDITS

Course Cr Grade Language Date

57720 Inverse problems 15,00 5 English 05.05.2017

including project work

Total number of credits
Total number of transferred credits out of

625,00 0,00

all credits

The language of completed studies has been registered at the University of Helsinki as of 1 August 2011.

Studies have been completed in the following languages

Finnish 531,00 cr Swedish 3,00 cr English 86,00 cr Japanese 5,00 cr

Credits (Cr) correspond to the ECTS (European Credit Transfer System) credits (1 Cr = 1 ECTS Cr). Credit units (Cu) are the credits (study weeks) of the old Finnish system.

GRADES USED AT THE UNIVERSITY OF HELSINKI

Completed studies and Bachelor's and Master's theses:

5 (excellent), 4 (very good), 3 (good), 2 (satisfactory), 1 (passable)

Old Master's theses, doctoral dissertations and Licentiate theses:

L (Laudatur), ECLA (Eximia cum laude approbatur), MCLA (Magna cum laude approbatur), CL (Cum laude approbatur), NSLA (Non sine laude approbatur), LUB (Lubenter approbatur), A (Approbatur)

Doctoral dissertations and Licentiate theses:

Pass, PasD (Pass with distinction)

Written and oral proficiency in the second national language of Finland:

G (good), SAT (satisfactory)

Practical training, skills courses and degrees:

Pass

The grading scale at the University of Helsinki is not a proportionate scale and does not therefore fully correspond to the ECTS grading scale.

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