

Tillykke med din kandidatgrad fra Aarhus Universitet

Hermed fremsendes beviset på, at du har afsluttet din kandidatuddannelse fra Aarhus Universitet. Jeg vil i den anledning ønske dig hjerteligt tillykke med kandidatgraden. Med en velfunderet kandidatuddannelse har du skabt et solidt fundament for at nå dine mål for fremtiden. Jeg er sikker på, at din faglige viden og kunnen vil vise sig værdifulde fremover.

Selvom du nu har etableret et godt fundament for din videre færd, skal viden vedligeholdes gennem hele livet. Aarhus Universitet tilbyder en bred vifte af efter- og videreuddannelsesmuligheder, som måske er relevante for dig på sigt. Både hvis du ønsker at bygge videre på din uddannelse, opfriske dine kompetencer, eller hvis du ønsker at udvide dine kompetencer ved at bevæge dig ind på helt nye fagområder. Du kan holde kontakten til Aarhus Universitet ved at tilmelde dig alumnenetværket via Aarhus Universitets hjemmeside og få faglig viden, tilbud og netværksmuligheder ligesom tæt på 40.000 andre tidligere studerende.

Universitetets valgsprog er Solidum petit in profundis – "Søger i dybet den faste grund". Valgsproget betegner den stræben, som er forudsætningen for at studere ved Aarhus Universitet. Jeg håber, at du vil fortsætte med at søge i dybet og finde den faste grund.

Velkommen blandt Aarhus Universitets kandidater.

Med venlig hilsen

Kristian Pedersen

Dekan for Aarhus Universitet Faculty of Natural Sciences





Congratulations on your Master's degree from Aarhus University

We are enclosing a certificate confirming that you have completed your Master's degree programme at Aarhus University. Allow me to congratulate you warmly on your degree. A robust Master's degree provides you with a sound basis for achieving your goals, and I feel certain that your expert knowledge and skills will prove to be valuable in the future.

Even though you have now established a good basis for future progress, it is important to maintain your knowledge on a lifelong basis. Aarhus University conducts a broad range of supplementary and further education courses which may be relevant for you in the long term. You can build on your Master's degree programme, refresh your competences, or develop your competences by studying entirely new subject fields. You can stay connected to Aarhus University by becoming a member of the Alumni Network via Aarhus University's website and receive research news and offers like close to 40,000 other former students.

The motto of Aarhus University is "Solidum petit in profundis" ("Seek a firm footing in the depths"). This motto describes the kind of hard work that is needed to study here. I hope you will continue to seek in the depths and find a firm footing.

Welcome to the ranks of Aarhus University's Master graduates.

Sincerely,

Kristian Pedersen

Dean of Aarhus University Faculty of Natural Sciences





Side 1 af 3

200395-2919 201803160

Ismaele Vincent Masiello

HAR DEN 27. OKTOBER 2022 BESTÅET

Kandidatuddannelsen i fysik

VED AARHUS UNIVERSITET
OG HAR DERMED RET TIL AT BETEGNE SIG

cand.scient. i fysik

Master of Science (MSc) in Physics candidatus scientiarum

Aarhus, den 21. december 2022

Kristian Pedersen

dekan for Aarhus Universitet Faculty of Natural Sciences





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200395-2919 201803160 I henhold til bekendtgørelse nr. 2285 af 1. december 2021, om universitetsuddannelser tilrettelagt på heltid (Uddannelsesbekendtgørelsen), er kandidatuddannelsen en forskningsbaseret uddannelse, der kvalificerer til selvstændigt at varetage erhvervsfunktioner på baggrund af kundskaber og metodiske færdigheder inden for et eller flere fagområder.

Kandidatuddannelsen i fysik er normeret til: 120 ECTS

Adgangsgrundlaget til uddannelsen var: Fysik, bach.

Ismaele Vincent Masiello

har opnået følgende resultater:

	7-trinsskala	ECTS-skala	<u>Bestået</u>
Obligatoriske kurser Fysikkurser Meritoverførte kurser 35 ECTS Meritoverført fra University of Vienna, Østrig Advanced Quantum Mechanics Lokal belastning: 10 ECTS Advanced Statistical Physics and Soft Matter Physics Lokal belastning: 10 ECTS Experiments in Quantum Optics & Quantum Information Lokal belastning: 10 ECTS Seminar about ongoing research in soft matter Physics			Bestået
Lokal belastning: 5 ECTS Astrofysik II 10 ECTS	10	В	Bestået
Elektronik og dataopsamling 10 ECTS	10	В	Bestået
Kerne- og partikelfysik 5 ECTS	12	A	Bestået
Kernefysik II 10 ECTS	12	A	Bestået
Praktisk programmering og numeriske metoder 10 ECTS	7	С	Bestået
Quantum Engineering II 10 ECTS	10	В	Bestået





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7-trinsskala ECTS-skala Bestået

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Specialeeksamen

12 Bestået

Speciale i fysik 30 ECTS Analysis of neutron diffraction by optically thin grating

Bevisets rigtighed bekræftes

Aarhus, den 21. december 2022

Allan H. Kallmeyer

uddannelsesadministrativ medarbejder





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Kompetenceprofil for uddannelsen

Formålet med kandidatuddannelsen er, på baggrund af de faglige og personlige kompetencer, som er erhvervet i den forudgående bacheloruddannelse, at udvikle den studerende fagligt og personligt, så kandidaten:

- Opnår kvalifikationer der giver adgang til ansættelse i private og offentlige virksomheder og
 organisationer såvel nationalt som internationalt, hvor der kræves sagkundskab på højt
 niveau inden for fysik.
- Erhverver de nødvendige forudsætninger for videre studier, herunder til ph.d. uddannelse.

Kandidaten har i forhold til bacheloren udbygget sin faglige viden, analytiske kompetencer og selvstændighed således, at kandidaten selvstændigt kan anvende videnskabelig teori og metode inden for fysik. Gennem uddannelsen har kandidaten opnået kompetencer inden for følgende overordnede kompetencemål:

- Kandidaten behersker fysik bredt og har detaljeret viden om centrale discipliner, metoder, teorier og begreber inden for fysik.
- Kandidaten kan selvstændigt planlægge, lede og gennemføre projekter og anvende resultaterne af disse i en fagligt relateret beslutningsproces.
- Kandidaten kan vurdere anvendeligheden og hensigtsmæssigheden af teoretiske, eksperimentelle og praktiske metoder til analyse og løsning af faglige spørgsmål og problemstillinger.
- Kandidaten kan selvstændigt og kritisk strukturere egen kompetenceudvikling.
- Kandidaten er i stand til systematisk og kritisk at sætte sig ind i nye fagområder.
- Kandidaten kan formidle og kommunikere faglige spørgsmål og problemstillinger i såvel et videnskabeligt som et alment forum.
- Kandidaten kan på naturvidenskabelig baggrund indgå i konstruktivt samarbejde om løsning af faglige problemstillinger.
- Kandidaten har forståelse for og indsigt i fysikkens sammenhæng med andre naturvidenskabelige fagområder og har kvalificeret viden om fysikkens samspil med det omgivende samfund.





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Ismaele Vincent Masiello

HAS ON 27 OCTOBER 2022 PASSED THE EXAMINATIONS REQUIRED FOR THE

Master's Degree Programme in Physics

AT AARHUS UNIVERSITY
AND HAS THUS BEEN AWARDED THE DEGREE

Master of Science (MSc) in Physics cand.scient. i fysik candidatus scientiarum

Aarhus, 21 December 2022

Kristian Pedersen

Dean of Aarhus University Faculty of Natural Sciences





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200395-2919 201803160 Pursuant to the Ministerial Order no. 2285 of 1 December 2021 on Degree Programmes at Universities (the University Programme Order (Uddannelsesbekendtgørelsen)), the Master's degree is a research-based full time programme of study which qualifies graduates for professional careers by providing them with expertise and methodological competences in one or more subject areas.

The Master's Degree Programme in Physics is rated at: 120 ECTS

Entrance qualification to the degree programme was: Bachelor's Degree Programme

Ismaele Vincent Masiello

has obtained the following results:

	7-point scale	ECTS scale	<u>Passed</u>
Compulsory Courses Physics Credit Transferred Courses 35 ECTS Credit transferred from University of Vienna, Austria Advanced Quantum Mechanics Local study load: 10 ECTS Advanced Statistical Physics and Soft Matter Physics Local study load: 10 ECTS Experiments in Quantum Optics & Quantum Information Local study load: 10 ECTS Seminar about ongoing research in soft matter Physics Local study load: 5 ECTS			Passed
Astrophysics II 10 ECTS	10	В	Passed
Electronics and Data Acquisition 10 ECTS	10	В	Passed
Nuclear and Particle Physics 5 ECTS	12	A	Passed
Nuclear Physics II 10 ECTS	12	A	Passed
Practical Programming and Numerical Methods 10 ECTS	7	С	Passed
Quantum Engineering II 10 ECTS	10	В	Passed





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7-point scale ECTS scale Passed

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Master's Thesis Master's Thesis in Physics

12 A

Passed

30 ECTS Analysis of neutron diffraction by optically thin grating

The validity of this document is confirmed

Aarhus, 21 December 2022

Allan H. Kallmeyer Administrative Officer





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Skills Profile for the Programme

The aim of the Master's degree programme is to develop the academic and personal skills the student acquired during the previous Bachelor's degree programme, so that the Master:

- Obtains qualifications for employment in private and public sector companies and organisations - both in Denmark and abroad - where a high level of expertise in Physics is required.
- Acquires the necessary prerequisites for further studies, including a PhD degree programme.

Compared with Bachelors, Masters have expanded on their academic knowledge, analytical skills and independence to the extent that the Master is able to independently apply scientific theory and methodology within the field of Physics. By completing the degree programme, the Master obtains skills in the following overall competence goals:

- The Master has general knowledge of Physics and detailed knowledge of key disciplines, methodologies, theories and concepts within Physics.
- The Master can independently plan, manage and implement projects and apply the results in scientifically relevant decision processes.
- The Master can assess the applicability and appropriateness of theoretical, experimental and
 practical methodologies for the analysis and solution of scientific questions and issues.
- The Master can structure his/her own competence development independently and critically.
- The Master is able to systematically and critically familiarise himself/herself with new subject areas.
- The Master can relay and communicate academic questions and issues to both a scientific and a general audience.
- The Master can collaborate constructively on a scientific basis to solve subject related issues.
- The Master has an understanding of and insight into the connection between Physics and the
 other scientific subject areas, and has qualified knowledge regarding the interaction
 between Physics and society at large.





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Diploma Supplement

This Diploma Supplement model was developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

1 INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

1.1 Last name(s)

Masiello

1.2 First name(s)

Ismaele Vincent

1.3 Date of birth (dd/mm/yyyy)

20/03/1995

1.4 Student identification number or code

Matriculation number: 201803160 / Civil registration number: 200395-2919

2 INFORMATION IDENTIFYING THE QUALIFICATION

2.1 Name of qualification and (if applicable) title conferred (in original language)

cand.scient. i fysik

Master of Science (MSc) in Physics

2.2 Main field(s) of study for the qualification

The degree programme provides students with advanced knowledge of basic and applied physics and materials science.

2.3 Name and status of awarding institution (in original language)

Aarhus Universitet (Aarhus University) is an independent institution under the public-sector administration and supervised by the Ministry of Higher Education and Science and regulated according to the University Act no. 261 of 18 March 2015.

2.4 Name and status of institution (if different from 2.3) administering studies (in original language)

Not applicable / as above

2.5 Language(s) of instruction/examination

Teaching/examination at Aarhus University takes place in Danish and English, although other languages may be used when appropriate.





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3 INFORMATION ON THE LEVEL AND DURATION OF THE QUALIFICATION

3.1 Level of qualification

Master's degree at NQF/EQF Level 7 referring to Second Cycle in the Bologna QF

3.2 Official duration of programme in credits and/or years

120 ECTS

3.3 Access requirements

Admission to the Master of Science requires a completed Bachelor of Science. Applicants with other qualifications may be admitted after an assessment of their qualifications.

4 INFORMATION ON THE PROGRAMME COMPLETED AND THE RESULTS OBTAINED

4.1 Mode of study

Full-time.

4.2 Programme learning outcomes

The degree programme expands the knowledge acquired in the Bachelor's degree programme in physics.

4.3 Programme details, individual credits gained and grades/marks obtained

Please refer to the enclosed transcript of records

4.4 Grading system and, if available, grade distribution table

http://ufm.dk/en/education-and-institutions/the-danish-education-system/grading-system/station-and-institutions/the-danish-education-system/grading-system/station-and-institutions/the-danish-education-system/grading-system/station-and-institutions/the-danish-education-system/grading-system/station-and-institutions/the-danish-education-system/grading-system/station-and-institutions/the-danish-education-system/grading-system/station-syst

4.5 Overall classification of the qualification (in the original language)

Not applicable for Danish qualifications

5 INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1 Access to further study

The candidatus(a) degree qualifies students for a professional career and scientific work e.g. for a doctorate or the PhD (ph.d.) degree.

5.2 Access to a regulated profession (if applicable)

Not applicable





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6 ADDITIONAL INFORMATION

6.1 Additional information

Aarhus University offers unique, alternative opportunities for research and education cutting across many different subjects, for the benefit of both students and researchers, as well as the authorities and the business community. These interdisciplinary combinations provide exceptional opportunities. Aarhus University combines quality in its services with diversity - a diversity that also makes sure that the university is in wide-reaching contact with all the important sectors of society.

Aarhus University has an international focus and makes targeted efforts to attract researchers and students from abroad.

Research and education

Academic values form the basis for all activities at Aarhus University. Via curious research, critical analysis and ongoing debate, researchers and students endeavour to find new ways to gain insight, understanding and education for the benefit of society as a whole. The university consists of four main academic areas. Combined, they cover the entire research spectrum - basic research, applied research, strategic research and research-based advice to the authorities. In all degree programmes, research and education are closely connected, and the research-based instruction - including teaching that spans the main academic areas - ensures the depth of the degree programmes.

A visionary university

The mission of Aarhus University is to ensure and develop knowledge, welfare and culture through research and research-based education, knowledge dissemination and external advice. The vision of Aarhus University is to belong to the elite of universities and to contribute to the development of national and global welfare via outstanding research and world-class degree programmes. The values of Aarhus University are based on the ethical challenges regarding freedom and independence that are described in the Magna Charta of European Universities. Staff and students at Aarhus University work enquiringly and critically, in open and dynamic interaction with the surrounding world.

6.2 Further information sources

For further information on this degree programme, please refer to http://studieguide.au.dk/en and the Aarhus University web site http://www.au.dk/en.





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7 **CERTIFICATION OF THE SUPPLEMENT**

7.1 Date

21 December 2022

7.2 Signature

Kristian Pedersen

Capacity

Dean of Aarhus University Faculty of Natural Sciences

7.4 Official stamp or seal



INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM 8

Please see the attached description of The Danish Higher Education System of April 2016





The Danish Higher Education System

April 2016

Public higher education institutions in Denmark are regulated by national legislation concerning degree structures, teacher qualifications and examinations. Accreditation in higher education is undergoing transition from programme-based accreditation to institutional accreditation. Programmes and institutions are accredited by national, independent accreditation agencies and the Accreditation Council.

Higher education institutions

Higher education is offered by five types of higher education institutions:

- 1. Business academies (Erhvervsakademi) offering professionally oriented short cycle and first cycle degree programmes.
- 2. University Colleges (*Professionshøjskole*) offering professionally oriented first cycle degree programmes.
- Maritime Education and Training Institutions offering professionally oriented short cycle and first cycle degree programmes.
- 4. General and specialised research universities (*Universitet*) offering first, second and third cycle degree programmes in academic disciplines.
- University level institutions offering first, second and third cycle degree programmes in subject fields such as architecture, design, music, and fine and performing arts.

Most higher education institutions are regulated by the Ministry of Higher Education and Science (type 1-5). The Ministry of Culture regulates a number of higher education institutions offering programmes within fine and performing arts (type 5).

Degrees in the Danish Higher Education System

Danish qualifications levels	Ordinary higher education degrees	Adult/continuing higher education degrees	Qualifications Framework for the European Higher Education Area – Bologna Framework	European/National Qualifications Framework for Lifelong Learning – EQF/NQF	
Academy Profession level	Academy Profession (AP) degree (90-150 ECTS)	Academy Profession (AP) degree (60 ECTS) (also known as Further Adult Education (VVU) degree)	Short cycle	Level 5	
	Professional Bachelor's degree (180-270 ECTS)*				
Bachelor's level	Bachelor's degree (within the arts) (180 ECTS)	Diploma degree (60 ECTS)	First cycle	Level 6	
	Bachelor's degree (180 ECTS)				
Master's level	Master's degree (within the arts) (120-180 ECTS)	Master degree	Second cycle	Level 7	
	Master's degree (120 ECTS)**	(60-90 ECTS)		ŕ	
PhD level	PhD degree (180 ECTS)		Third cycle	Level 8	

^{*} Can be obtained through a full regular bachelor's programme (180-270 ECTS) or a top up bachelor's programme following an Academy Profession degree.

Higher education institutions measure study activities in ECTS credits. 60 ECTS correspond to one year full-time study.

Qualifications framework

The qualification levels form the basis for the Danish National Qualifications Framework for Higher Education, which is certified in accordance with the overarching Bologna Framework according to the principles adopted by the European Ministers of Higher Education. Danish higher education qualifications at levels 5-8 of the Danish Qualifications Framework for Lifelong Learning (NQF) correspond with levels 5-8 of the European Qualifications Framework (EQF).

Admission and progression

General access to higher education in Denmark requires an Upper Secondary School Leaving Certificate or comparable qualifications. Admission to some particular programmes requires entrance examination or submission of a portfolio of artistic work. Holders of an Academy Profession degree can obtain a Professional Bachelor's degree within the same field of study through a top-up programme. Completion of a first cycle degree qualifies students for admission to the second cycle.

^{**} A few Master's programmes are up to 180 ECTS.

Ordinary Higher Education degrees

The Academy Profession degree is awarded after 90-150 ECTS and includes a period of work placement of at least 15 ECTS. The programmes are development-based and combine theoretical studies with a practical approach. Programmes are, among others, offered within Marketing Management, Computer Science and Chemical and Biotechnical Science. The Danish title is field of study followed by the abbreviation *AK* and the English title is *AP Graduate in* [field of study].

The Professional Bachelor's degree is awarded after 180-270 ECTS and includes a period of work placement of at least 30 ECTS. The programmes are applied programmes. They are development-based and combine theoretical studies with a practical approach. Examples of professional bachelor's degree holders are nurses, primary and lower secondary school teachers and certain types of engineers. The Danish title is *Professionsbachelor i* [field of study] and the English title is *Bachelor of* [field of study].

The Bachelor's degree from a university is awarded after 180 ECTS. The programmes are research-based and are offered in all scientific fields. The Danish title is *Bachelor (BA) i* [field of study] or *Bachelor (BSc) i* [field of study] and the English title is *Bachelor of Arts (BA) in* [field of study] or *Bachelor (BSc) of Science in* [field of study].

The Bachelor's degree (within the arts) is awarded after 180 ECTS. The programmes are based on research and artistic research. Programmes are offered within the fine arts. The Danish title is *Bachelor (BA) i* [field of study], *Bachelor i musik (BMus)* [field of study] or *Bachelor i billedkunst (BFA)* [field of study] and the English title is *Bachelor of Arts (BA) in* [field of study], *Bachelor of Music (BMus)* [field of study] or *Bachelor of Fine Arts (BFA) in* [field of study]. A higher education degree within theatre or filmmaking is awarded after 3-4 years of study (180-240 ECTS).

The Master's degree is awarded after 120 ECTS. The programmes are research-based and are offered in all scientific fields. The Danish title is abbreviated to *Cand*.[latin abbreviation of academic area] *i* [field of study]. The English title is *Master of Arts (MA) in* [field of study] or *Master of Science (MSc) in* [field of study].

The Master's degree (within the arts) is awarded after 120-180 ECTS. The programmes are based on research and artistic research. The Danish title is abbreviated to *Cand*.[latin abbreviation of academic area] [field of study]. The English title is *Master of Arts (MA) in* [field of study], *Master of Music (MMus)* [field of study] or *Master of Fine Arts (MFA) in* [field of study]. Music Academies offer a specialist degree of 2 to 4 years following the master's degree.

The PhD degree is awarded after 180 ECTS. PhD programmes are offered by the universities and some university level institutions offering degrees in the artistic and cultural field.

Detailed descriptions of degree levels can be found in the Danish Qualifications Framework at www.nqf.dk. Please consult the relevant Diploma Supplement for information about the learning outcome of any specific degree.

Adult and continuing higher education

The programmes normally consist of 2 years of part-time study, equivalent to 1 year of full-time study (60 ECTS credits). Certain master programmes require 1½ years of full-time study (90 ECTS credits). Admission requirements are a relevant educational qualification and at least 2 years of relevant work experience.

Adult and continuing education is available at levels corresponding to qualifications of the ordinary higher education system. The Further Adult Education degree (*videregående voksenuddannelse/akademiuddannelse*) is awarded after studies at short cycle level and gives access to diploma programmes.

The Diploma degree (*diplomuddannelse*) is awarded after studies at first cycle level and gives access to master programmes. The Master degree (*masteruddannelse*) is awarded after studies at second cycle level.

The 7-point grading scale

The grading system used in all state-regulated education programmes as of September 2007 is the 7-point grading scale. Apart from the 7-point grading scale, pass/fail assessment may also be used. 02 is the minimum grade for passing an exam.

Description of grades: 12: For an excellent performance displaying a high level of command of all aspects of the relevant material, with no or only a few minor weaknesses; 10: For a very good performance displaying a high level of command of most aspects of the relevant material, with only minor weaknesses; 7: For a good performance displaying good command of the relevant material but also some weaknesses; 4: For a fair performance displaying some command of the relevant material but also some major weaknesses; 02 For a performance meeting only the minimum requirements for acceptance; 00: For a performance which does not meet the minimum requirements for acceptance; -3 For: a performance which is unacceptable in all respects.

Matriculation number: 12106843



Date of birth, Soc.Sec.Nb.: 20.03.1995, TWYN200395

Status of the student: regular Nationality: Italien

Fulfilled precondition: Univ.-Reife gem. Koop.-Vertrag

(Ausland) 15.06.2021

Ismaele Vincent Masiello Max-Winter-Platz 6, 28 1020 Wien Österreich

Certificate of subjects successfully completed

Exam	ECTS	Hrs.	Date	Examiner	Mark
UA 066 876 Master's degree programme Physics UG2002 from 01.10.2021					
Physik UG2002					
M-VAF A 1 Specialisation in Current Research Topics A 1					
* PUE Advanced Quantum Mechanics (Course Nr. 260050 , winterterm 2021) Incoming Exchange Student's Module	4.00	2.00	12.01.2022	Jan Lüdtke	3
* M-CORE 9 Written Module Exam Experiments in Quantum Optics & Quantum Information (summerterm 2022)	10.00	6.00	27.06.2022	Markus Arndt, Sebastian Pedalino, Lee Arthur Rozema, Philip Walther	1
* <mark>SE Seminar about ongoing research in soft matter Physics</mark> (Course Nr. 520005 , summerterm 2022)	<mark>5.00</mark>	2.00	22.06.2022	Christos Likos	1
* M-CORE 6 Written Module Exam Advanced Statistical Physics and Soft Matter Physics (summerterm 2022)	<mark>10.00</mark>	6.00	02.03.2022	Christos Likos	1
* <mark>M-CORE 5 Written Module Exam Advanced Quantum Mechanics</mark> (winterterm 2021)	<mark>10.00</mark>	6.00	27.01.2022	Massimiliano Procura	4
* PUE Advanced Statistical Physics and Soft Matter Physics (Course Nr. 260009, winterterm 2021)	4.00	2.00	26.01.2022	Jan Smrek	1
* PUE Experiments in Quantum Optics and Quantum Information (Course Nr. 260076 , winterterm 2021)	4.00	2.00	21.01.2022	Sebastian Pedalino, Lee Arthur Rozema	4

Date:	President of studies legislations:
01.08.2022	UnivProf. Mag. Dr. Peter Lieberzeit

The most recent marks are labelled with an asterisk (*).

Marks: excellent (1), good (2), satisfactory (3), sufficient (4), insufficient (5), successful participation (+), participation without success (-) Over-all assessment: graduated with honors (Z), graduated (B), failed (U)

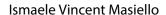
Non-graded and invalid exams: According to Par. 74, the grading of an exam is invalid, when either the mark or the registration for this exam was obtained by fraud (code (N)). According to Par. 13 (7) of the statute of the Vienna University, exams obtained by fraud with illicit accessories, must not be graded (code (X)).

Advice: please contact the competent study service center in case of corrections (missing or incorrect marks, incorrect association of a mark to a module).

This certificate is a valid attestation of the progress of studies according to Austrian law § 2 subpar. 1 lit. b of the "Familienlastenausgleichsgesetz".

page 1/3 DVR: 0065528

Registration number: 12106843





Certificate of subjects successfully completed

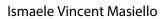
Exam	ECTS	Hrs.	Date	Examiner	Mark

Marks, which are displayed as "not yet associated with any module", are awaiting their allocation to their respective modules.

This allocation may be performed by the user in the record of exams on U:SPACE (https://uspace.univie.ac.at) or by the competent study service center.

page 2/3 DVR: 0065528

Registration number: 12106843





Certificate of subjects successfully completed

	Signatory	Universitaet Wien
	Date/Time-UTC	2022-08-01T14:09:57.997+02:00
THE WAR	Verification	Information about the verification of the electronic signature can be found at: https://www.signaturpruefung.gv.at
Maure		Information about the verification of the printout can be found at: https://www.digitales.oesterreich.gv.at/amtssignatur
Note		signed with a qualified electronic signature. According to § 4 gnature Act it in principle is legally equivalent to an handwritten

Date:	President of studies legislations:
01.08.2022	UnivProf. Mag. Dr. Peter Lieberzeit

page 3/3 DVR: 0065528