

## CONSORTIUM AGREEMENT FOR THE ERASMUS MUNDUS MASTER COURSE European Master in Nuclear Physics (NuPhys) Specific Agreement for Action 1

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## CONSORTIUM AGREEMENT FOR THE ERASMUS MUNDUS JOINT MASTER DEGREE IN NUCLEAR PHYSICS (EMJMDNP)

### The parties:

Universidad de Sevilla (hereinafter US-ES), represented by its Rector Mgfco.-- Prof. Dr. Miguel Ángel Castro Arroyo (responsible unit: Vice-rectorate for Internationalization),

Hereinafter referred to as the Consortium Coordinator,

and

Universidad Autónoma de Madrid (UAM-ES), responsible unit: Vicerrectorado de Relaciones Internacionales, legal representative: Prof. José María Sanz Martínez, Rector.

Universidad de Barcelona (UB-ES), responsible unit: Vicerrectorado de Proyección e Internacionalización, legal representative: Prof. Dolores Sánchez Aguilera, Vice-Rector for Academic Planning.

Universidad Complutense de Madrid (UCM-ES), responsible unit: Vicerrectorado de Relaciones Internacionales y Cooperación, legal representative: Prof. Carlos Andradas Heranz, Rector.

Universidad de Salamanca (USAL-ES), responsible unit: Vicerrectorado de Internacionalización through its Oficina de Proyectos Internacionales, legal representative: Prof. María Ángeles Serrano García, Deputy Rector.

Université de Caen Normandie (UNICAEN-F), responsible unit: Département de Physique, Chimie et Ingénierie (PCI), legal representative: Prof. Pierre Denise, President.

Università degli Studi di Catania (UniCT-I), responsible unit: Department of Physics and Astronomy, legal representative: Prof. Francesco Basile, Rector.

Università degli Studi di Padova (UniPD-I), responsible unit: Dipartimento di Fisica e Astronomia, legal representative: Prof. Rosario Rizzuto, Rector.

Hereinafter referred to as "the contractors" or "partner institutions". Together, they form "the NuPhys Consortium" and "parties to this agreement".

### 1. Purpose of the agreement

The purpose of the agreement is to agree on the implementation and management of the Erasmus Mundus Joint Master Degree (EMJMD) in Nuclear Physics governed by the Framework Agreement (number 2016-2070, date 31/10/2016) between the Education, Audiovisual and Culture Executive Agency (EACEA) and the Consortium Coordinator of the NuPhys Consortium.

This agreement shall specify the respective rights and obligations of the parties with regards to the running of the joint programme EMJMDNP.

All parties are subject to the rules and regulations set up by the Education, Audiovisual and Culture Executive Agency (EACEA) in the agreement mentioned above regarding both the responsibilities towards the EACEA and towards other parties to this agreement.

## 2. Validity and amendments

This agreement shall come into force on the day it has been signed by each of the parties but shall have retroactive effect from the date of signature of the Grant Agreement.

This agreement is valid only when it harmonises with the meaning of the Framework Agreement. The validity of this agreement shall be made only by supplementary agreements signed on behalf of each of the parties by legal representatives.

The period of validity of the present Agreement will be linked to the Grant Agreement number 2016/2070 signed by the Universidad de Sevilla, acting as the consortium coordinator, and the Education, Audiovisual and Culture Executive Agency (EACEA), dated on October 31<sup>st</sup> 2016 and with validity till October 30<sup>th</sup> 2021. The agreement could be extended if all the consortium members agree in case of renewal of the Erasmus Mundus certification.

## 3. Management of the Programme

### 3.1 Coordinating and Partner Institutions

With regard to the Erasmus Mundus recognition and mobility grant funding, and as required by the European Commission, the University of Seville (US-ES) shall be referred to as the “coordinating institution”, Universities Autónoma de Madrid (UAM-ES), Barcelona (UB-ES), Complutense de Madrid (UCM-ES), Salamanca (USAL-ES), Caen-Normandie (UNICAEN-FR), Padova (UniPD-IT) and Catania (UniCT-IT) shall be referred as “partner institutions”. All of them together form the “Consortium”.

The institution at which the students are resident at any one time shall be referred to as the “host institution”. At any one point in time, each student shall be associated with one host institution. Over the duration of the Programme, each student shall be associated with, at least three Institutions.

### 3.2 Obligations of the Coordinating institution

The Consortium Coordinator manages the administrative, legal and financial matters of the NuPhys Consortium and the NuPhys Master Course towards the EACEA. The Consortium Coordinator is responsible for all contacts with EACEA.

The Consortium Coordinator shall report to NuPhys consortium in such a way that these have full understanding of the administrative, legal and financial matters.

The Consortium Coordinator shall undertake:

- To take all the steps necessary to prepare for, perform and correctly manage the programme set out in this contract and annexes, in accordance with the objectives of the project as set out by EACEA.
- To send the contractors copies of the agreements signed with EACEA together with the annexes and any other official document concerning the project.
- To notify and provide the contractors with any amendment made to this agreement.
- Inform contractors of any communication sent on the Master by the EACEA and any communication sent by the Coordinator to EACEA.

The University of Seville, as the coordinating university in the consortium, shall undertake:

- To comply with all the provisions binding the Consortium Coordinator to the EACEA.
- To propose the Academic Coordinator and the Administrative Coordinator of the Programme.
- To nominate the members of the University of Seville composing the Academic Commission and the Board of Management (Academic Committee + NuPhys Secretariat).

### 3.3 Obligations of the partner institutions

The partner institutions are subject to the rules and regulations set up in the Framework Agreement number 2016-2070, date 30/10/2016.

Each of the partner institutions shall undertake:

- To take all the steps necessary to prepare for, perform and correctly manage the programme set out in this contract and its annexes, in accordance with the objectives of the project as set out in the agreement concluded between the EACEA and the legal representative of the Consortium Coordinator of the NuPhys.
- To comply with all the provisions of agreements binding the Consortium Coordinator to EACEA.
- To communicate the Consortium Coordinator any information or document required by the latter that is necessary for the management of the project.
- To accept the responsibility for all the information communicated to the Consortium Coordinator, including details of costs claimed and, where appropriate, expenses difficult to justify.
- To nominate one member for the Academic Commission and one member for the Selection Committee and the Quality Committee. Every single partner institution must nominate its own representatives.

The partner institutions also undertake:

- To promptly notify any delay in performance or any event that may impact the joint master programme to the NuPhys consortium Board.
- To inform the Board of Management of relevant information received from third parties as regards the joint master course.
- To act all the times in good faith and in a manner that reflects the good name, goodwill and reputation of the other contractors and in accordance with scientific and academic ethics.
- To participate in a cooperative manner at the meetings of the different bodies under this Consortium Agreement.
- To undertake all duties defined by the Management Board in the EMJMDNP Handbook to be updated yearly.

### **3.4 Consortium Structure**

#### **3.4.1 Faculty**

The NuPhys Consortium is founded on the NuPhys Community, constituted by all the Partner's teaching bodies, scholars, administrative, students and alumni involved in the NuPhys Master Course.

The Faculty of the NuPhys Consortium is constituted by the teaching staff of the Master Course, and whoever participates in the implementation of the Master Course teaching activities and tutoring, seminars and schools/workshops. The Faculty comprises also the administrative bodies which are in charge of the NuPhys Master Course organization, from each partner's body. The Faculty is coordinated by the NuPhys Academic Coordinator, from the US-ES.

#### **3.4.2 Academic Committee**

The NuPhys Academic Committee is responsible for the correct implementation of the EMJMD and the general management. It is formed by one local academic of each full partner (universities), two persons from the associated partners/associated companies (proposed by the NuPhys Coordinator), and one student from the coordinating institution.

#### **3.4.3 The NuPhys Joint Secretariat**

The NuPhys Secretariat is the executive board, in charge of executive management, communication with EACEA, administrative and financial management. It is located at the coordinating institution and is composed by the Consortium Academic Coordinator and one administrative assistant and supported by the administration of the International Graduate School of the US-ES. It is in contact with local administrative staff at partner institutions and supervises exchange of student documents among partners. The Secretariat ensures update of the website and application system.

#### 3.4.4 NuPhys Management Board

The NuPhys Management Board is composed by the Academic Committee plus the NuPhys Secretariat and shall support the Consortium Coordinator in managing the programme. The Management Board shall meet at least once a year. The Management Board will select the scholars. The meetings could be on-line.

The NuPhys Management Board shall undertake:

- To establish the financial conditions regarding the Erasmus Mundus grant.
- To review and amend the scholarship conditions, if necessary.
- To ensure quality assurance of the programme.
- To define common standards for admission, a common application procedure and to organize a joint student and scholar selection process.

Concerning the selection of the students and scholars, the Board of Management through the Selection Committee shall:

- Review admission and selection criteria annually and make necessary changes.
- Agree on the selection procedure and methods
- Agree on the allocation of evaluation tasks between partners.
- Select the students and establish the proposed list of scholarships holders to be sent to EACEA.
- Decide on the students study tracks.
- Select the invited scholars and establish the proposed list of scholars to be sent to EACEA.

#### 3.4.5 The NuPhys Selection Committee

The NuPhys Selection Committee is in charge of the issues related to the admission criteria, selection procedure and awarding of Erasmus Mundus scholarships to the best students. It is formed by one academic from each full partner (universities) as well as one person representing the associated partners. This committee will have regular meetings before the beginning of each EMJMD edition to manage all applications received and to apply the admission criteria for the student selection process as well as for the award of the EMJMD scholarships, according to Erasmus + rules. One selection meeting will be organised annually by the Consortium Coordinator typically in February-March for a first selection of candidates. In case of available places for self-financed students in the Master, there could be a second meeting in May. The meetings could be on-line.

#### 3.4.6 The NuPhys Quality Committee

The NuPhys Quality committee is in charge of ensuring the internal EMJMD quality and to design improvement strategies. This committee is formed by one academic of each full partner (universities), one representative of the NuPhys associated partners/companies and two students of the present EMJMD edition. This committee will implement all the internal evaluation strategies and mechanisms. It will also be in charge of coordinating with the external organisms/institutions/agencies responsible for the external quality assurance of the EMJMD.

#### 3.4.7 The NuPhys Associated partners

Concerning the role of the Associated Partners, collaboration is specifically asked for with reference to:

- Student internships that are planned during the third term of the Master Course, content of the internship as well as the related research topic will be jointly assessed;
- Student final Master Thesis that are planned during the fourth term of the Master Course, content of the Master Thesis as well as the related research topic will be jointly assessed;
- Evaluation on the Master Course process and results, certifying quality of the educational programme, innovation research contents, job placement and opportunities within innovative research sectors;
- Nomination of key figures in the NuPhys to be invited to attend the NuPhys community, and specifically the Academic Committee;
- Diffusion of results, partnerships and project/program development;

- Fund raising, networking and promotion.

### 3.4.8 The NuPhys Alumni Association

The Alumni association will play an important role in the Consortium:

- They will be invited to the NuPhys Management Board meetings;
- They can propose topics and lecturers to the Management Board;
- They will be in continuous contact with the Consortium and support activities of diffusion and promotion;
- They may follow the alumni career through questionnaire surveys;
- They may be involved in school/workshops organized by the Consortium.
- They will be invited to participate in Newsletter of the Consortium.

### 3.5 Disputes

The parties agree that any disputes arising from the performance of this Agreement shall be resolved in a forum agreed by all parties.

## 4. Joint procedures and final degree awarded

### 4.1 Joint student application, selection and admission procedures

Applications for admission will be submitted on-line, through the NuPhys web-page application system, to the Coordinating Institution (US-ES) for their processing.

Applicants should have excellent University records, with at least 3 years of prior studies corresponding to 180 ECTS, with major in Physics. The selection committee could consider with lower preference applications with majors in: Chemistry, Engineering, Applied Mathematics or equivalent. Proof of English B2 or higher (or equivalent) is required. Applications will be ranked according to the following criteria, rated on a scale of 0 to 100:

- academic results of the student within his/her class (typical requirement: Grade Point Average) of at least 75% of the scale maximum -- up to 40 points
- personal or on-line interview with the selection committee -- up to 40 points
- relevant work experience related to the field of the Master Course -- up to 5 points
- covering letter by the student -- up to 5 points
- recommendation from recognized scientists -- up to 5 points
- level of English knowledge (higher than B2) -- up to 2 points
- other merits to be considered by the selection committee -- up to 3 points
- relevance of the student's background with the field of the Masters course -- this will be assessed in the interview and used as a renormalization factor on the points obtained in it.

For every intake, maximum 25 students will be accepted; out of these around 60% will be selected for a scholarship from the EMJMD Programme.

### 4.2 Admission and registration

The selection committee of the consortium will analyse applicants and propose a ranking as a function of their merits. The first 25 applicants in the list will be admitted to the program, the rest will be in a waiting list. Without prejudice to high academic standards, in order to ensure geographical diversity among students, the Consortium shall respect the following basic criteria when selecting students for an Erasmus scholarship: No more than two of the students selected for an Erasmus scholarship should have the same nationality.

On admission, student will register for the first-year Programme at the entrance institution (US-ES for path 1, UniPD-I for path 2 and UniCT-I for path 3) and for the second year at UNICAEN-F for all paths. Registration at each institution will follow the institution's normal registration rules.

### 4.3 Joint assessment methods of student's performance

The NuPhys Consortium accepts the EEES/ECTS grading system as the joint grading scale to be used in the Master Course.

NuPhys will use the ECTS grading system with the following conversion factors:

EEES/ ECTS	FX-F FAIL	E Sufficient	D Satisfactory	C Good	B Very Good	A Excellent	A+ Exceptional
SPAIN	<5,0	5,0-5,9	6,0-6,9	7,0-7,9	8,0-8,9	9,0-9,5	9,6-10 MH
FRANCE	<10	10-10,9	11,0-11,9	12,0-13,9	14,0-15,9	16-17,9	18,0-20,0
ITALY	<18	18-20	21-23	24-25	26-27	28-29	30-30 e lode

#### Global evaluation:

Each term will give place to a partial student evaluation step, as follows:

- S1, S2 and S3 (only courses) Term evaluation: at the end of the first, second and third semesters, each Term's teaching body will evaluate students in terms of knowledge, applying knowledge and skills acquired during term courses. All organization and marks will follow the local regulations and translated to the ECTS grading as given above. The global mark of all courses will count 65% in the total student score.
- At the end of student internship, the Consortium tutor and a committee will evaluate a short report produced by the student and his/her oral presentation, as to evaluate acquired knowledge, skills and awareness. This evaluation counts for a 10% in the total score of the student. This report evaluation will be also included in the internal evaluation process of each student.
- At the end of the fourth term, the students will be evaluated in term of knowledge, applying knowledge, making judgments, communication skills and learning skills. Final thesis project counts 25% in the final score. Student thesis final project (developed in term S4) will be evaluated in two steps, taking in consideration the standard requirements of the Master's thesis: the thesis will be assessed and graded in written form by the thesis supervisor and an external reader from another consortium partner institution. In case of a discrepancy between the two written reports an external reader from the third partner University/Associated Center will be decisive. Once, a positive inform is obtained, the Thesis will be defended at the corresponding University following its rules. The Thesis will be graded using the local markings and translated to the joint European ECTS grading scale given above.
- The grades from courses (65%), internship (10%) and Master Thesis defence (25%) expressed in ECTS grading scale will be composed for obtaining the Master final grade.

The Master score will be delivered according to ECTS grading scale, so to be convertible to every other national grading scale.

### 4.4 Exams and examination boards

All matters related to exams, examination boards and the corresponding procedures will be those of the host institution. The marks given in the local scale will be converted to the EEES/ECTS scale grading as given in the preceding table. These include the regular courses, internship and Master Thesis. However, for the internship the Consortium will provide with a specific committee that will evaluate all students in each intake.

### 4.5 Re-sits

While at the host institution, the local policies for re-siting local Masters level examinations will apply. These include courses, internship and Master Thesis.

In case of failure and need of new inscription, the extra costs of this inscription will be fixed by the host institution and paid by the student by his/her own funds.

#### 4.6 Internships

UNICAEN-F is the institution designed by the Consortium to have the responsibility of tutoring and monitoring internship's student activities. The internships will be programmed in advance, to make them a real working experience, valuable for future job placement. Moreover during the internships the students will define the project and initiate the work for the Master Thesis.

#### 4.7 Supervision of Thesis

The development of the final Master Thesis will be supervised and evaluated in the host institution during the fourth semester according to the local procedures and regulations of the institution.

#### 4.8 Student records

With relation to assessment and reporting, the host institution has the primary and ultimate responsibility for obtaining from the instructors and transmitting to the coordinating institution in timely fashion, assessment records for all participant students. The coordinating institution will keep the summary of all student records and will transmit them to the partner institutions as soon as possible after the assessment period.

#### 4.9 Degree awarding Institutions and Degree

NuPhys is a joint master programme offered by different institutions. All parties to this agreement are degree awarding institutions.

The EMJMDNP is a 120 ECTS programme. It lasts two years.

The University of Seville, in accordance with the current legislation, will issue a single degree with a specific reference to the Universities participating in the master course. Contractor Universities may award their own degree.

Currently, the participant Universities are only able to award **NuPhys** successful students a multiple Master degree based on the existing national Masters. Each hosting Higher Education Institution (HEI) can award its own Master degree to all students who have obtained a minimum of 30 ECTS in the institution. The Master degrees delivered by each HEI member of the Consortium are fully accredited in the participant countries.

The present relevant Master degrees active in the participant Universities are:

SPAIN: there is a joint national Master degree in "Física Nuclear", coordinated by the US-ES and participated by all Spanish Universities of the consortium. The Spanish universities can award this joint Master degree to the **NuPhys** students. This interuniversity master degree is regulated by the Royal Decree 1393/2007 (October 29) and started on the academic course 2010/2011. Accreditation has been successfully revised on May 2015. Upon approval of the NuPhys proposal, the University of Seville has applied for the accreditation of the 120 ECTS Erasmus Mundus Master degree "Máster Erasmus Mundus en Física Nuclear (European Master in Nuclear Physics) to the University Council of the Ministry of Education, Culture and Sports. This Master degree will be a joint degree at least at the Spanish level (that is, a single diploma signed by the Rectors of all Spanish universities involved in the consortium). Upon accreditation, the US will award the 120 ECTS "Máster Erasmus Mundus en Física Nuclear" (European Master in Nuclear Physics).

ITALY:

UniPD-I can award the Master of Science (M.Sc.) Degree in Physics (Laurea Magistrale in Fisica – LM17).

UniCT-I can award the Master of Science (M.Sc.) Degree in Physics (Laurea Magistrale in Fisica – LM17).

FRANCE. The UNICAEN will award the Master of Science (M.Sc.) Degree in Physics (Master mention Physique) to students who have successfully validated the 120 ECTS of the EMJMD, including 30 ECTS from the Caen Master (Master de Physique, parcours NAC-Int). The associated local Master has been



accredited by the National Ministry (Ministère de l'Enseignement Supérieur et de la Recherche) in the academic year 2016/2017 for five years as "Master, mention Physique" according to the legislation (arrêté du 22 janvier 2014 NOR: ESR51331846A). The path NAC (Noyaux, Atomes, Collisions) of this Master has courses in English and academic contents optimized for the EMJMD.

In addition, the **NuPhys** Consortium is fully aware of the importance of the delivery of a Joint Diploma after completion of the **NuPhys** joint programme, in terms of transparency and visibility at European level and beyond. It is fully committed to work on this aspect: each consortium member has already checked the possibility of issuing a joint degree at the national level and analysing the most successful mobility scheme of students will tune the most suitable way to achieve such fundamental joint result. Our final aim is that EMJMDNP will award an official joint-degree to the successful students signed by Rectors or Presidents of all involved universities. The official name of the proposed joint Master degree will be "**European Master in Nuclear Physics**".

Name of institution	Title of degree awarded for this Masters Course by this institution (also in the original language)	Type of degree awarded
University of Seville (ES)	Máster Erasmus Mundus in Nuclear Physics (European Master in Nuclear Physics).	multiple
Universities Autónoma de Madrid, Barcelona, Complutense de Madrid, and Salamanca (ES)	Máster Erasmus Mundus in Nuclear Physics (European Master in Nuclear Physics).	multiple
Université de Caen Normandie (F)	Master mention Physique.	Multiple
University of Catania (IT)	Master of Science (M.Sc.) Degree in Physics (Laurea Magistrale in Fisica).	Multiple
University of Padova (IT)	Master of Science (M.Sc.) Degree in Physics (Laurea Magistrale in Fisica).	Multiple

## 5. Study Programme

Universities formulate and approve through their respective academic bodies all active study programmes which are organised into semesters, modules and ECTS credits. Study programmes shall cover the whole study period, including final examinations.

The complete Programme with the course structure for three possible paths is included in Annex I.

The Master course is structured in four semesters (S1, S2, S3 and S4). S1 and S3 will be from September till February, S2 and S4 will cover from February to September.

### 5.1 Changes to the approved study programme

The joint study programme is the one included in Annex I. It can be modified by mutual consent between the parties and the EACEA, without detriment to students already enrolled.

## 6. Registration fees and other financial matters

### 6.1 Erasmus Mundus grants and scholarships

The Consortium establishes a specific use and allocation of funding to undertake the financial management of the programme. All the financial resources will be distributed among partners according to the payment scheme given in Annex II. The corresponding amounts will be transferred to each university at the end of the first semester at the latest to guarantee the smooth running of the master course.

In general conditions, travel case for the organisation of the activities of those responsible for academic matters of the Master will be covered by each university, except for the annual Board Management meetings whose expenses will be covered by the Coordinating institution.

The grant for the financial management of the scholarships for partner-country students selected and the scholarships for programme-country students will be transferred to the US-ES, the Coordinating institution. The scholarships for scholarship holders will also be transferred to the Coordinating institution.

### **6.2 Tuition Fees and administration fees**

The US-ES as Coordinating institution will allot the fees amongst partner universities and will manage them according to the criteria agreed by the consortium (see Annex II). The total amount of the fees for partner-country students as well as the total amount of the fees for programme-country students will be distributed among the universities in the consortium, taking into account the number of students admitted by each university as given in Annex II. These amounts distributed amongst the universities in the consortium will be devoted to the management of the Master through the responsible units of each university.

The US-ES will pay this amount to each partner through a bank transfer as soon as it receives from EACEA the total amount of the registration fees of the partner-country and programme-country students. Payment for each semester will be transferred to the universities at the end of particular semester at the latest.

The Coordinating institution will be free to deduct the administration fees applied according to the administration rules of the US-ES, always with the previous consent of the student.

The amounts allocated to students for mobility and installation costs will be transferred to the students after their arrival to the entrance University and will be transferred to a bank account in Europe (money will be only transferred to bank account in Spain, Italy or France). The subsistence costs will be transferred to the student bank account on a monthly scheme. Concerning semester 3, an extra amount covering the admission fee at the University of Caen will be transferred to the scholarship holders, such that they can be enrolled at the University following the local rules. This fee is fixed at the national level. The same amount will be correspondingly subtracted from the global tuition fees of the University of Caen (see annex 2). The grant contribution to the participation costs will be taken directly by the Coordinating institution.

The tuition fee for non-Erasmus scholarship holders will be fixed by the host institution. The Consortium could decide eventual total or partial fee-waivers for some of these students.

### **6.3 Insurance**

The Consortium, through the Coordinating institution, will select a suitable insurance policy for students that is 100% compliant with the EACEA minimum requirements.

### **6.4 Additional Costs**

The costs for travel, room and board are responsibility of each student and shall be paid by his/her own funds. The institutions shall oblige their students to keep, and maintain in full effect, health insurance with coverage acceptable to the host institution and applicable government requirements.

Fees other than tuition fees, such as re-examination, late registration and others, may be payable by the students in addition to the tuition fee. These shall be levied at the standard rate of each institution.

In case of failure and need of new inscription, the extra costs of this inscription will be fixed by the host institution and paid by the student by his/her own funds.

## 7. Students matters

### 7.1 Student selection

According to Erasmus Mundus Masters Course regulations set up by EACEA, the NuPhys Consortium selects and admits the students to the programme.

Students involved in the mobility programme shall enjoy the benefits and shall be likewise subject to the regulations and norms which are in force in the Universities concerned in the programme.

Students will be selected and admitted to the programme by the Consortium (see point 4.2). On admission, students will register (as stated in point 4.2) and the corresponding tuition fees then will be distributed amongst partner universities according to the chosen mobility itinerary.

### 7.2 Student Agreement

The Consortium Coordinator will receive all scholarships awarded by EACEA. The Consortium will distribute the scholarships using a specific agreement which has to be signed by the student to facilitate the administrative and financial relations between the Consortium and the student. The tuition and administration fees will be deducted directly from the EMJMD scholarship with prior consent from the student. The Erasmus Mundus scholarships will be transferred only to a European bank account.

The student's rights and responsibilities are the same as those valid for any other student at the institution where the student is studying at the specific moment. The student must comply with the requirements of the institution in question as regards documentation for registration procedures and documentation for visa purposes (for more information see the model of Student Agreement).

The Consortium institutions assume no responsibility whatsoever for any property of the students or persons under the care of any host institution and is hereby expressly released and discharged from any and all liability for any loss, injury or damage to persons or property that may be sustained by reason of activities pursuant this Agreement.

While in a host institution, the local policies for the resolution of complaints and appeals will apply.

### 7.3 Admission and registration of students

All selected students will be sent an official admission letter from both the Coordinating and host institutions. The admission letter will indicate the university where the students will follow each semester based on the selection decision path.

The Consortium Coordinator will communicate to the partners the students that must be enrolled in the partner University. The Coordinating institution shall process all requests for modification of study tracks.

### 7.4 Alumni Association

The NuPhys Alumni Association has the responsibility to facilitate students in relation to material problems and to promote forms of coordination and activities. Information about the NuPhys Alumni Association will be published on the NuPhys website.

## 8. Quality assurance in the NuPhys programme

Quality assurance will be based on both internal and external assessment measures. External quality assurance will be guaranteed by arranging periodic global evaluations, under the responsibility of the Quality Committee. This evaluation will take place every third year of the programme and the Quality Committee may decide to involve extra members not regularly part of the Quality Committee.

Internal quality mechanisms: each semester of course is assessed by students about the work of teachers and learning opportunities. Each course is assessed by teachers, after the final examination, concerning the results achieved and objectives met. Feedback seminars will be held at the end of each semester with the participation of students, teachers and administration.

## 9. Dissemination of the programme

The Coordinator will organise the common dissemination efforts (through mails and Internet) but the partners will disseminate information for applicants through their own dissemination channels. All parties are responsible for creating local programme websites for the distribution of information.

## 10. Publicity

All institutions in the consortium shall agree to work together to deliver publicity for the programme.

### 10.1 Web-site

There shall be a single website for the programme. The Coordinating institution shall maintain this programme website and partner institutions will maintain links to that website from their own websites.

### 10.2 Prospectus entries

Each institution shall be responsible for making entries in its own prospectus and other publicity materials.

### 10.3 Use of crest and logos

If an institution wishes to include the crest, logo or other identifying mark of another institution in publicity materials, then this use must be approved in advance by the institution that owns the logo, crest or mark reused.

## 11. Reports

The contractors shall provide the Consortium Coordinator with any information and documents required for the preparation of progress report for Actions 1. The contractors shall contribute to the preparation of the Final Report by the date communicated by the Consortium Coordinator.



## 12. Sustainability

The contractors shall start actions to guarantee the sustainability of the Master course after finishing the funding by the Erasmus Programme.

COORDINATOR: Universidad de Sevilla

Authorised to sign on behalf of US-ES

By (signature):



Name: Prof. Miguel Ángel Castro Arroyo


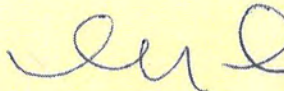
Position: Rector Mgfc.

**COUNTERPART SIGNATURE PAGE (Universidad Autónoma de Madrid)**

**PARTNER # 1 & COORDINATOR: Universidad de Sevilla**

Authorised to sign on behalf of US-ES

By (signature):



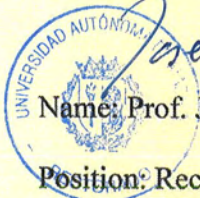
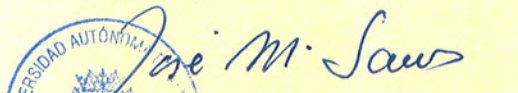
Name: Prof. Miguel Ángel Castro Arroyo

Position: Rector Mgfc.

**PARTNER # 2: Universidad Autónoma de Madrid**

Authorised to sign on behalf of UAM-ES

By (signature):



Name: Prof. José María Sanz Martínez

Position: Rector

Date: 29/5/17

**COUNTERPART SIGNATURE PAGE (*Universidad de Barcelona*)**

PARTNER # 1 & COORDINATOR: Universidad de Sevilla

Authorised to sign on behalf of US-ES

By (signature):



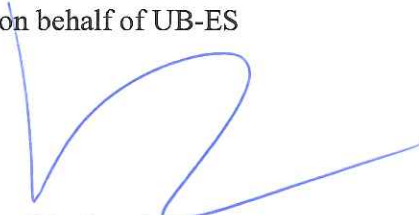
Name: Prof. Miguel Ángel Castro Arroyo

Position: Rector Mgfc.

PARTNER # 3: Universidad de Barcelona

Authorised to sign on behalf of UB-ES

By (signature):



Name: Prof. Dolores Sánchez Aguilera

Position: Vice-Rector for Academic Planning.

Date: 04/06/2017



UNIVERSITAT DE  
BARCELONA

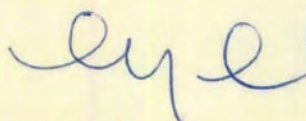
Oficina de Mobilitat i  
Programes Internacionals

**COUNTERPART SIGNATURE PAGE** (*Universidad Complutense de Madrid*)

PARTNER # 1 & COORDINATOR: Universidad de Sevilla

Authorised to sign on behalf of US-ES

By (signature):



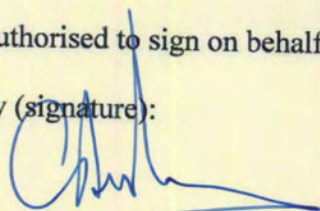
Name: Prof. Miguel Ángel Castro Arroyo

Position: Rector Mgfco.

PARTNER # 4: Universidad Complutense de Madrid

Authorised to sign on behalf of UCM-ES

By (signature):



Name: Prof. Carlos Andradás Heranz

Position: Rector

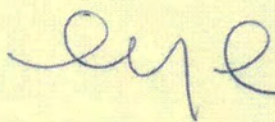
Date: 10/5/2017

**COUNTERPART SIGNATURE PAGE (*Universidad de Salamanca*)**

PARTNER # 1 & COORDINATOR: Universidad de Sevilla

Authorised to sign on behalf of US-ES

By (signature):



Name: Prof. Miguel Ángel Castro Arroyo

Position: Rector Mgfco.

PARTNER # 5: Universidad de Salamanca

Authorised to sign on behalf of USAL-ES

By (signature):



Name: Prof. María Ángeles Serrano García

Position: Deputy Rector

Date: 2/05/2017







UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA



Universitat  
de Barcelona

UNICAEN  
UNIVERSITÉ  
CAEN  
NORMANDIE



UNIVERSIDAD  
DE SALAMANCA  
CURIA DE PATRONATO, FACULTAD



**COUNTERPART SIGNATURE PAGE (*Université de Caen Normandie*)**

**PARTNER # 1 & COORDINATOR: Universidad de Sevilla**

Authorised to sign on behalf of US-ES

By (signature):



Name: Prof. Miguel Ángel Castro Arroyo

Position: Rector Mgfc.

**PARTNER # 6: Université de Caen Normandie**

Authorised to sign on behalf of UNICAEN-F

By (signature):

Le Président de l'Université  
de Caen Normandie

Name: Prof. Pierre Denise

Pierre DENISÉ

Position: President

Date:

**COUNTERPART SIGNATURE PAGE (Università degli Studi di Catania)**

**PARTNER # 1 & COORDINATOR: Universidad de Sevilla**

Authorised to sign on behalf of US-ES

By (signature):



Name: Prof. Miguel Ángel Castro Arroyo

Position: Rector Mgfc.

**PARTNER # 7: Università degli Studi di Catania**

Authorised to sign on behalf of UniCT-I

By (signature):



IL PRORETTORE  
Prof. Francesco Magnano San Lio

Name: Prof. Francesco Basile

Position: Rector

Date:





**COUNTERPART SIGNATURE PAGE (Università degli Studi di Padova)**

PARTNER # 1 & COORDINATOR: Universidad de Sevilla

Authorised to sign on behalf of US-ES

By (signature):



Name: Prof. Miguel Angel Castro Arroyo

Position: Rector Mgfc.

PARTNER # 8: Università degli Studi di Padova

Authorised to sign on behalf of UniPD-I

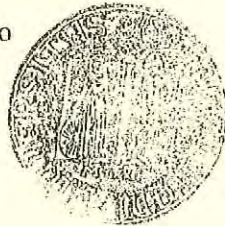
By (signature):

**Deputy Rector**  
Giancarlo Dalla Fontana

Name: Prof. Rosario Rizzuto

Position: Rector

Date: 10.05.2017



## ANNEX I: Programme

### DESIGN AND STRUCTURE OF THE PROJECT

NuPhys is a 120 ECTS Erasmus Mundus Joint Master degree of 24 months' duration. The Master is structured for all students in 5 modules and divided into 4 terms (semesters). A common basis of fundamental knowledge is given to all students during the first semester. A progressive specialization is then acquired through the choice of one out of three different paths, corresponding to experimental/large accelerators (EXP), a theoretical (THEO), or applied/small accelerators (APP) focus.

The NuPhys Master program will start with an **orientation day** in each starting university at the same time so as to be all connected via a video conference. Coordinators of each Consortium university will welcome students and introduce the NuPhys program and the participating universities. This first step of networking among students provides the opportunity to exchange views, experiences, and plans with each other at a very early stage. Initial knowledge of students will be checked during the orientation day through a "Pilot Test" and online dedicated resources will be available for bridging possible gaps in order to assure the same starting point to all students.

#### 1.1 Modules

**Module 1:** Basics nuclear physics and tools (24 ECTS)

**Module 2:** Advanced nuclear physics (48 ECTS), with three specialities (experimental, theory, applications)

**Module 3:** Common advanced course (winter course, 6 ECTS)

**Module 4:** Internship (12 ECTS)

**Module 5:** Master Thesis (30 ECTS)

The contents of the modules are briefly described below:

**Module 1:** (BAS) will be devoted to the basic knowledge required on general Physics, and Complementary/Interdisciplinary courses adapted to the chosen path (notably atomic, molecular and astrophysics). These courses will be concentrated in the first year, mainly in the first semester, and include topics as Advanced Quantum Mechanics, Structure of Matter, Basic Nuclear Physics: theory and laboratory, Advanced Mathematics, Advanced Statistical Mechanics, etc.

**Module 2:** Students can follow one of three paths offered: Experimental/large accelerators (EXP), Theoretical (THEO), or Applied/small accelerators (APP). This module will give the specialized focus of the Master curriculum towards fundamental or applied nuclear physics. Fundamental physics includes either an experimental or a theoretical focus. Applied physics is especially focused on biomedical applications, but also includes fundamentals in accelerators technology, archaeometry, monitoring of nuclear waste, and nuclear fusion plasma physics. The specialization is progressive, starting already in the first year and being finalized in the third semester. Topics include Nuclear Structure and Reactions, Nuclear Astrophysics, Weak and Strong Interactions, Collision Physics, Many Body Theory, Nuclear Physics Applications: Art, Materials, Nuclear Physics Applications: Radioprotection and Therapy, Metrology and Data Analysis, Experimental Nuclear Physics, Advanced Nuclear and Subnuclear Laboratory, and Accelerator Physics and advanced Instrumentation.

**Module 3:** (ADV): Selected topics with special invited lecturers to be held during two weeks in the third semester for all students in France. This common course will be programmed during two weeks at the end of S3. The choice of period and location is done to optimize the mobility scheme of the students (see below). Topics and lecturers will be selected every year for the next course in a co-organization with TALENT (6 ECTS).

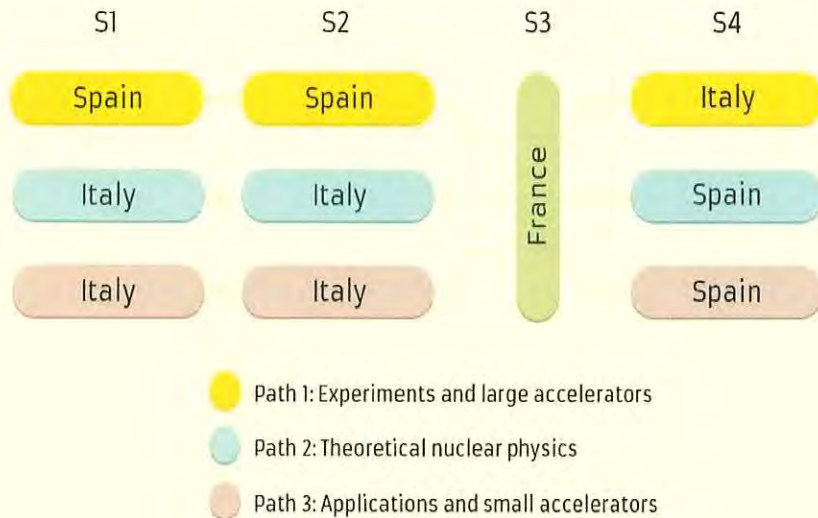
**Module 4:** (INTERNSHIP) will be done in the third semester. It is dedicated to student individual internship (either experimental, theoretical or applied topics are accepted), which will take place in different institutional or industrial research centres in Caen (France) (internships in other partner institution or in an associated centre in a third country according to the chosen path and desired specialization could be admitted under the advice of the Academic Committee). During the internships (S3) the students could define the project and initiate the work for the Master Thesis. Students will be supported by internal (Consortium) and external (Associated Members) tutoring. The internships are programmed by the Universities in advance, so as to provide a real working experience, valuable for future job placement. A "Practice Oriented Day" is organized with the participation of representatives of the hosting Institutions, tutors and representatives of the Consortium, at the beginning of the third term in Caen, so as to present the Internships programs, to share the discussion on the work topics, aims and methods with students, and to consolidate the Consortium network.

**Module 5:** (THESIS) will include the initial steps to write a short project of Master Thesis which has to be approved by the Master Academic Committee and the conduction of a research work in theoretical, experimental or applied Nuclear Physics with the direction of one or more advisors from one or more Universities (works with coordinate tutors from two partner Universities, or from one University and one associated industrial/host institution, will be programmed). This module includes the writing of the Master Thesis and the public defence of the achieved results. This defence will be at the host institution under the rules of it, but inclusion in the defence Committee of academics of other consortium institutions and/or associated partners is highly recommended. In case of failure, an extra opportunity will be given to the student in his/her host institution following the local rules for Master Thesis defence. In this case, the inclusion in the "Defence Committee" of an external member from other internal (Consortium) and external (Associated Members) institution is highly recommended too.

**There will be three specialization paths:**

- **PATH 1:** Experiments and Instrumentation in large accelerators. Students following this path (50% approx.) will start in Spain for S1 & S2, then go to France for S3 and finally will go to Italy (either UniPD-I or UniCT-I) for the Master Thesis in S4.
- **PATH 2:** Theoretical nuclear physics. Students within this path (25% approx.) will start in Italy (UniPD-I) for S1 & S2, then to France for S3 and, finally to Spain for the Master Thesis in S4.
- **PATH 3:** Applications and small accelerators. Students within this path (25% approx.) will start in Italy (Catania) for S1 & S2, then to France for S3 and, finally to Spain for the Master Thesis in S4.

The mobility scheme depending on the path selected is given in the following figure:



The general scheme ECTS distribution of the Course is presented in the following table, giving the number of credits associated to each module according to the mobility and specialization path:

PATH 1 - EXP: Large accelerators (~1/2 of the students\*)

PATH 2 - THEO: Theoretical Nuclear Physics (~1/4 of the students\*)

PATH 3 - APP: Small accelerators (~1/4 of the students\*)

	MOD1	MOD2			MOD3	MOD4	MOD5
		EXP	THEO	APP			
PATH 1	24	24 or 12	12	12 or 24	6	12	30
PATH 2	24	12	36	0	6	12	30
PATH 3	24	12 or 24	12	24 or 12	6	12	30
Total	24	48			6	12	30

\*) Experience coming from national Master degrees in previous years makes us to estimate that the number of students coming to path 1 will be around 50% of the total, while those selecting paths 2 and 3 will be around 25% in each itinerary.

The list of the courses offered in each University for semesters one, two and three each academic year is given in the table below for each path separately. Concerning semester 3, only 12 ECTS have to be obtained in regular courses, since 12 ECTS correspond to the internship and 6 ECTS are assigned to a common course (module 3, see below) which is compulsory for all students. Semester 4 is devoted to the preparation of the Master thesis in a host institution, research centre or company (MOD 5).

The courses listed below should be understood for the first edition of the Master, some courses of the specific paths may be replaced in future editions by other courses under the approval by the Academic Committee of the Consortium.

<b>MODULE 1 - basic nuclear physics and tools</b>	<b>MODULE 2 - advanced nuclear physics (EXP)</b>	<b>MODULE 2 - advanced nuclear physics (THEO)</b>	<b>MODULE 2 - advanced nuclear physics (APP)</b>	<b>MODULE 3- Common Advanced Course</b>	<b>MODULE 4 – Internship</b>	<b>MODULE 5 – Master Thesis</b>
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**PATH 1: Experiments, instrumentation and large accelerators (1/2 of the students)**

<b>Spain S1</b>	Basic Experimental Nuclear Physics (6)	Quantum Mechanics (6)	Atomic and Molecular Physics (6)	Advanced Experimental Techniques in Nuclear Physics (6)	Applied Nuclear Physics I (6)
<b>Spain S2*</b>	Nuclear Structure: properties and models (6)	Applied Nuclear Physics II (6)	Introduction to Nuclear Reactions (6)	Many-body Theories in Nuclear Physics (6)	Nuclear Astrophysics (6)
<b>France S3</b>	Research Internship + Thesis project (12)	Common Advanced course (6)	<b>Choice between</b>		
			<b>Metrology and data analysis (6) + exp.nucl.phys.+accelerators (6)</b>		
			<b>Applications for therapy (12)</b>		
<b>Italy S4</b>	<b>Master thesis on experimental nuclear physics, instrumentation large accelerators (30)</b>				

\*Lectures on subjects in S2 will be concentrated in one intensive teaching week for each topic in different Universities. List of dates and places for each course will be given in advance.

**PATH 2: Theoretical nuclear physics (1/4 of the students)**

<b>UniPD-I S1</b>	Theoretical Physics (6)	Theoretical Physics of Fundamental Interactions(6)	Nuclear Physics (6)	Physics Laboratory (6)	Radioactivity and Nuclear Measurements (6)
<b>UniPD-I S2</b>	Subnuclear Physics (6)	Introduction to Many-Body Theory (6)	Introduction to radiation detectors (5) + Introduction to the world of work (1)	Nuclear Astrophysics (6)	Advanced Physics Laboratory A (6)
<b>France S3</b>	Research Internship + Thesis project (12)	Common Advanced course (6)	Choice between		
			Theoretical nuclear, atomic and collision physics (12) (Strongly recommended for this path)		
			Metrology and data analysis (6) + exp.nucl.phys.+accelerators (6)		
<b>Spain S4</b>	Master thesis on theoretical nuclear physics (30)				



**PATH 3: Applications and small accelerators (1/4 of the students)**

<p><b>Catania S1</b></p>	<p>Meccanica Quantistica Avanzata (Advanced Quantum Mechanics)(6)</p>	<p>Tecniche Nucleari Avanzate applicate alla Medicina/ Radiattività Ambientale (Advanced Nuclear Techniques Applied to Medicine/ Environmental Radioactivity) (6)</p>	<p>Meccanica Statistica Avanzata (Advanced Statistical Mechanics) (6)</p>	<p>Lab. Fisica Nucleare e Subnucleare (Nuclear &amp; Subnuclear Physics Lab.) (6)</p>	<p>Fisica Nucleare e subnucleare (Nuclear and Subnuclear Physics) (6) or Struttura Nucleare (Nuclear Structure) (6)</p>
<p><b>Catania S2</b></p>	<p>Teoria delle reazioni nucleari (Nuclear Reaction Theory) (6)</p>	<p>Teoria delle Interazioni Forti (Theory of the Strong Interaction) (6)</p>	<p>Astrofisica nucleare (Nuclear Astrophysics) (6)</p>	<p>Metodi Sperimentali per la Fisica Nucleare/Laboratori o di Fisica dell'Ambiente (Experimental Nuclear Physics / Environmental Physics Lab) (6)</p>	<p>Archeometria / Fisica degli Acceleratori e Applicazioni (Archeometry / Accelerator Physics and Applications) (6)</p>
<p><b>France S3</b></p>	<p>Research Internship + Thesis project (12)</p>	<p>Common Advanced course (6)</p>	<p><b>Choice between</b></p> <p>Metrology and data analysis (6) + exp.nucl.phys.+accelerators (6)</p> <p>Applications for therapy (12)</p>		
<p><b>Spain S4</b></p>	<p>Master thesis on applications and small accelerators (30)</p>				

All Courses will be taught in English and the students will be provided with the appropriate academic material in English.

It is important to note that in addition to the participant Universities, the associated Labs and Companies can be the hosts for internship and Master Thesis development. In particular, the following associated research centres could be the host for students: CERN (Geneva, Switzerland), the National Laboratory at Legnaro (Padova, Italy), National Laboratory del Sud (Catania, Italy), National Accelerator at GANIL (Caen, France), GSI Accelerators (Darmstadt, Germany), National Centre Accelerator (Seville, Spain), Accelerator Centre at Madrid (Madrid, Spain), CSIC (IEM, Madrid and IFIC, Valencia), and CIEMAT (Madrid, Spain).

Finally, it is worth mentioning that regular opportunities (meetings of the Academic Committee, Quality Committee, summer course, etc.) will be scheduled to critically and constructively identify where the content and the coherence of the study programme, the learning outcomes, or any other aspect of the EMJMD, can be improved. The inclusion of students and industry/research facilities associated partners in the Quality Committee will facilitate to accommodate the EMJMD to new academic/industry needs, if necessary.

## ANNEX II: Budget

### BUDGET OF THE ACTION ERASMUS MUNDUS JOINT MASTER DEGREE IN NUCLEAR PHYSICS

The given quantities are for 3 editions of the Master

TOTAL EU GRANT	1891000 Euros
Scholarships	1721000 Euros
Consortium lump sum	170000 Euros

#### Total scholarship number and distribution

Type	Number of scholarships	Fees	Travel & Installation	Subsistence	TOTAL/ scholarship	TOTAL
Programme Country (1)	11	6000	2000	24000	32000	352000
Partner country (2)	34	6000	7000	24000	37000	1258000
Latin-America	3	6000	7000	24000	37000	111000
TOTAL Scholarships	48					1721000

#### Scholarship distribution per edition as sent by the EACEA

	2017/2019	2018/2020	2019/2021
Programme country (1)	3	4	4
Partner country (2)	11	11	12
Latin-America	1	1	1
TOTAL	15	16	17

We can change the distribution, so as having 16 scholarships for every edition.

**(1). Programme Country students:** Students from any of the 28 EU Member States, EEA-EFTA States (Iceland, Liechtenstein & Norway), Turkey and The Former Yugoslav Republic of Macedonia (FYROM).

**(2). Partner Country students:** Students from a country other than (1) and who are not residents nor have carried out their main activity (studies, work, etc.) for more than a total of 12 months over the last five years in one of these countries.

**All numbers done below are for 16 Erasmus Mundus granted students per intake. The Consortium will agree on the distribution of the fees of the self-financed students.**

## **Preparation year 2016/2017**

Income: 20000 Euros lump sum

Devoted to:

1. WEB page design: 3000 Euros
2. Partial time contract (50%) administration + web maintenance + social networks + communications with applicants: 12627,27 Euros
3. Travel and living expenses of two Consortium persons to the initial meeting in Brussels (F. Gulminelli (Caen) and J.M. Arias (Seville)) November 17-18: approx. 1000 Euros

There are still approx. 3500 euros for a meeting of the Consortium previous to the starting date for the Master (selection and/or academic committee).

## **First Edition 2017/2018**

Income: 50000 Euros lump sum + 96000 Euros inscriptions of scholarship students (16 x 6000 Euros). In principle there could be 9 students more with no UE scholarship (self-financed or with grants from other institutions including Universities). The corresponding amounts are not computed here and have to be distributed after the enrolment. TOTAL from Erasmus: 146000 Euros.

### **Distribution of Fees**

The fee, 3000 Euros/year, means 3000 Euros /60 ECTS = 50 Euros/ECTs. The fees (96000 Euros) will be distributed among the partners, giving to each responsible unit 38 Euros per ECTS lectured times the number of students enrolled. In the case of the University of Caen, a part of this amount corresponding to the specific local inscription fees of the scholarship holders, will be directly given to the students upon arrival such that they can follow the local requirement for enrolment in Master studies. This amount will be correspondingly subtracted from the fee transferred to the Caen University. In the first calculation the ECTS corresponding to the Master Thesis will be included on average since at this moment we do not know the places selected by the students. The amount 1140 euros/Master will be assigned on the average basis; in a second round deviations will be corrected.

The rest of the fee, 12 Euro x 120 ECTS x 16 students = 23040 euros will be devoted to activities linked with the Master Course with the following distribution:

- Medical insurance for the 16 students covering all European countries (approx. 500 euros/ (year x student) = 1000 euros/ edition student) = 16000 Euros (this should be included in the student fee following the EACEA rules).

In addition the following items will be managed by the coordinating institution:

- University Seville for administrative tasks as Coordinator (approx. 4.8% of 146000) = 7040 Euros).

### **Distribution of the lump sum:**

The lump sum, 50000 Euros, will be managed by the coordinating institution for the following items

1. Welcome day in US-ES in S1 (8 students) = 1200 Euros
2. Welcome day in UniCT-I in S1 (4 students) = 600 Euros
3. Welcome day in UniPD-I in S1 (4 students) = 600 Euros
4. Welcome day in UNICAEN-F in S3 (16 students) = 2400 Euros

These amounts (total 4800 Euros) will be transferred to the corresponding University and is its responsibility organizing the corresponding welcome days.

5. NuPhys Administrative assistant contract = 12800 Euros
6. Organization of the winter school (2 weeks) in coordination with TALENT for all students. This includes travelling and living expenses for at least 4 invited lecturers and at least 8 weeks of stay (AECEA norms).

TOTAL SCHOOL = 14400 Euros (- 3648 coming from the corresponding fees to these 6 ECTS activity) = 10752 Euros

7. Internship defence (travel and living expenses for the defence Committee: 4 representatives of the Consortium for one week) = 6200 Euros
8. One Consortium Committee meeting = 7600 Euros
9. Report on the NuPhys JMD Edition = 1500 Euros
10. There are 6348 Euros left for extra activities decided by the Consortium (end of course ceremony, extra meetings, etc.)

TOTAL AMOUNT COVERS THE LUMP SUM FOR THE FIRST EDITION: 50000 Euros

Expected distribution of students with EU scholarship among the three paths

	Path 1 (8 students)	Path 2 (4 students)	Path 3 (4 students)
S1	Seville (30 ECTS)	UniPD-I (30 ECTS)	Catania (30 ECTS)
S2	Any Spanish Univ (30 ECTS)	UniPD-I (30 ECTS)	Catania (30 ECTS)
S3	Caen (30 ECTS)	Caen (30 ECTS)	Caen (30 ECTS)
S4	UniPD-I (4 students)- Catania (4 students)	4 students to be distributed among the Spanish Univ.	4 students to be distributed among the Spanish Univ.

ECTs lectured in each institution:

	S1 + S2	S3	S4 (Thesis)
US-ES	36 ECTS x 8 students	----	30 ECTS x 3 student
UniPD-I	60 ECTS x 4 students	----	30 ECTS x 4 students
Catania	60 ECTS x 4 students	----	30 ECTS x 4 students
Caen	----	24 ECTS x 16 students	----
WINTER SCHOOL		6 ECTS x 16 students	
UAM-ES	6 ECTS x 8 students	----	30 ECTS x 1 student
Barcelona	6 ECTS x 8 students	----	30 ECTS x 1 student
UCM-ES	6 ECTS x 8 students	----	30 ECTS x 2 student
Salamanca	6 ECTS x 8 students	----	30 ECTS x 1 student

## AMOUNT ALLOCATED TO EACH INSTITUTION FOR THE FIRST EDITION

	Enrolment	Master Thesis	Welcome	TOTAL AMOUNT/1st intake
US-ES	10944	3420	1200	15564
UniPD-I	9120	4560	600	14280
Catania	9120	4560	600	14280
Caen	14592*	0	2400	16992*
UAM-ES	1824	1140	0	2964
Barcelona	1824	1140	0	2964
UCM-ES	1824	2280	0	4104
Salamanca	1824	1140	0	2964
School	3648 (already taken out from the School organization, see item 6 in distribution of lump sum)	0	0	3648
TOTAL	54720	18240	4800	
		<b>72960</b>	4800	77760

\* As mentioned in the text, part of this amount corresponding to the specific local inscription fees of the scholarship holders, will be directly given to the students upon arrival such that they can follow the local requirement for enrolment in Master studies. This amount will be correspondingly subtracted from the amount cited here to be transferred to the Caen University.

The amount allocated to each University can be used for waiving (total or partially) of the enrolment fee for those students not having UE fellowship.