## AGREEMENT ON PARTICIPATION IN THE

# International Doctorate Network in Particle Physics, Astrophysics and Cosmology (IDPASC)

#### BETWEEN

CERN, European Organization for Nuclear Research, MAP\_Fis - joint doctorate program of the University of Minho, of the University of Aveiro and of the University of Porto, University of Algarve, Faculty of Sciences and Technology of the University of Coimbra, University of Évora, University of Granada, University of Granada, University of Lisbon, Instituto Superior Técnico - Technical University of Lisbon, University of Paris Diderot (Paris VII ), University of Santiago de Compostela, Department of Mathematics and Computer Science of the University of Udine, University of Valencia

# Preamble

The International Doctorate Network in Particle Physics, Astrophysics and Cosmology (IDPASC) is an interdisciplinary network whose purpose is to create new high-level experts in the fields of Particle Physics, Astrophysics and Cosmology. In particular it should help to create the future scientific and physics staff for an European Particle Physics, Astrophysics and Cosmology Programme. The doctorate network in particle physics, astrophysics and cosmology will be promoted by each partner university.

# Agreement

#### Article 1

The contracting partners shall promote the development of the high level education in Particle Physics, Astrophysics and Cosmology in the form of common research and training projects undertaken by professors and researchers from the IDPASC Network. They shall also promote the mutual exchange of information and other didactic materials. The parties agree to actively encourage and stimulate the mobility of professors and researchers involved in the research or training exchange activities offered by the partner institutions mentioned herein. Moreover, they shall encourage postgraduate (and undergraduate, where allowed by the competent Faculties) student mobility, particularly student participation in high level education in particle physics, astrophysics and cosmology. Physics, Astrophysics and Cosmology Departments and Laboratories participating in the doctorate network will host the candidates during their research work.

#### Article 2

All the activities related to the doctorate network will be overseen by an Academic Council composed by two professors and/or researchers from each partner. The Academic Council will elect a coordinator every two years. The coordinator will manage the regular activities of the network following the decisions of the Academic Council.

#### Article 3

In this context, the collaborating institutions shall take particular care to encourage the development of joint courses and joint tutorship for research on various scientific topics in particle physics, astrophysics and cosmology and will favour student and teacher participation.

#### Article 4

Every year, the partner Universities will determine the total number of places available for doctoral students. Students admitted to a doctoral course of one of the partner Universities can apply to participate in this doctorate network. As a consequence of the admission procedure, candidates will be admitted to the doctorate network in a single partner University. Doctoral students will pay enrolment/tuition fees only to the home University, according to the rules of each university.

#### Article 5

The IDPASC network will provide a set of training courses, specialised seminars, schools and advanced workshops on particle physics, astrophysics and cosmology, as well as stays in qualified Laboratories and Research Units; in particular, a short joint school will be organised each year. This training can be recognised by the partner Universities and recommended to their students. The individual courses developed under these agreements can be organized according to the ECT System. Students will receive a certificate signed by the IDPASC Coordinator stating that they have participated in the IDPASC network activities, specifically in at least one event of the IDPASC joint courses.

### Article 6

At the end of the PhD training period the students will submit a written PhD thesis, including a summary in English, to the home university. The thesis will have been preevaluated by experts in the field of particle physics, astrophysics and cosmology, and will be defended according to the rules of the home university. When possible, the jury shall contain representatives of the IDPASC network or endorsed by it. After approval of the thesis and its successful defence, if they satisfy the requirements indicated in Article 7 and bearing in mind the rules of each university, students will receive a PhD diploma which shall mention that they have been awarded the title of DOCTOR EUROPAEUS. A supplement to the diploma will further mention that the doctoral work was carried out under and supported by the INTERNATIONAL DOCTORATE NETWORK IN PARTICLE PHYSICS, ASTROPHYSICS and COSMOLOGY.

### Article 7

In order to obtain the title of DOCTOR EUROPAEUS the conditions established by the Confederation of European Union Rectors' have to be fulfilled, including the following requirements:

1. The PhD thesis defence will be accorded if at least two professors from two higher education institutions of two European countries, other than the one where the thesis is defended, have given their review of the manuscript;

2. At least one member of the jury should come from a higher education institution in another European country, other than the one, where the thesis is defended;

3. A part of the defence must take place in one of the official languages, other than the one(s) of the country, where the thesis is defended;

4. The thesis must partly have been prepared as a result of a research period of at least one trimester spent in another European Country.

# Article 8

The intellectual property generated in the frame of IDPASC activities shall be the property of the part carrying out the work generating that foreground.

In case of joint ownership of Foreground, each of the joint owners shall be entitled to use their jointly owned Foreground free of charge, and without requiring the prior consent of the other joint-owner(s) for their own direct use only. Parties' shares of ownership shall be proportional to the intellectual contribution invested in generating that specific Foreground. If the joint owners do not reach an agreement on the respective shares in a reasonable period of time such as one year, the shares of each Party shall be considered as equal. The joint owners shall agree on all protection measures and the division of related cost in a joint ownership agreement negotiated in advance.

### Article 9

The present agreement, done in fifteen originals, will entry into force from a.a. 2010/2011 and will be valid for five academic years, in order to guarantee the completion of three doctoral programmes, each lasting three academic years. Other partners may be included in the doctorate network on the approval of all the participating partners.

For the CERN:

Date, stamp and signature of legal representative

Prof. Rolf-Dieter Heuer Director General of CERN – European Organization for Nuclear Research

For the MAP\_Fis- joint doctorate program of the University of Minho, of the University of Aveiro and of the University of Porto:

Date, stamp and signature of legal representatives

Prof. António M. Cunha Rector of the University of Minho

Prof. Manuel António Cotão de Assunção Rector of the University of Aveiro

Prof. José Carlos Diogo Marques dos Santos Rector of the University of Porto

Prof. José Manuel Pereira Carmelo Director of the MAP-Fis joint doctorate program

For the University of Algarve: Date, stamp and signature of legal representative

> Prof. João Pinto Guerreiro Rector of the University of Algarve

For the Faculty of Sciences and Technology of the University of Coimbra: Date, stamp and signature of legal representative

Prof. João Gabriel Monteiro de Carvalho e Silva Director of the Faculty of Sciences and Technology of the University of Coimbra

For the University of Évora: Date, stamp and signature of legal representative

> Prof. Carlos Alberto dos Santos Braumann Rector of the University of Évora

For the University of Granada: Date, stamp and signature of legal representative

> Prof. Francisco González Lodeiro, Rector of the University of Granada

For the University of Lisbon: Date, stamp and signature of legal representative

> Prof. António Sampaio da Nóvoa Rector of the University of Lisbon

For the Instituto Superior Técnico - Technical University of Lisbon: Date, stamp and signature of legal representative

> Prof. António Manuel da Cruz Serra President of the Instituto Superior Técnico, Technical University of Lisbon

For the University of Paris Diderot (Paris VII): Date, stamp and signature of legal representative

> Prof Vincent Berger. President of the University of Paris Diderot (Paris VII)

For the University of Santiago de Compostela: Date, stamp and signature of legal representative

> Prof. Senén Barro Ameneiro Rector of the University of Santiago de Compostela

For the Department of Mathematics and Computer Science of the University of Udine: Date, stamp and signature of the Head of Department

Prof. Franco Blanchini

For the University of Valencia: Date, stamp and signature of legal representative

> Prof. Esteban Morcillo Rector of University of Valencia