



“Philosophiae Doctor” Entrance Exams Academic Year 2014/15

The International School for Advanced Studies in Trieste offers post-graduate training to obtain a “Philosophiae Doctor” (Ph.D) degree in the following fields:

Ph.D course	Places Available
Astroparticle Physics	4
Astrophysics	5
Cognitive Neuroscience	7
Functional and Structural Genomics	7
Geometry and Mathematical Physics	8
Mathematical Analysis, Modelling, and Applications	8
Neurobiology	8
Physics and Chemistry of Biological Systems	5
Statistical Physics	5
Theoretical Particle Physics	5
Theory and Numerical Simulation of the Condensed Matter	5

The Ph.D programmes last for three years and are based on teaching and research activities, with examinations to determine admission from one year to the next and the attainment of the Ph.D degree.

• Fellowships and other benefits:

The School awards fellowships for 3 years, extendable for a fourth year subject to approval by the School authorities and to availability of funds.

The yearly amount of the fellowships is, at the moment, of € 15.010,32 gross (9,57% tax).

Candidates may also hold fellowships from other sources that may be increased by School funds up to the aforementioned amount.

A contribution towards living expenses of the amount of €100,00 gross per month will be awarded to those who will subscribe a registered rent contract in the Trieste province.

A contribution towards the expenses to be enrolled in the health insurance system up to € 198,77 will be granted to non-EU students only.

A contribution (70% of the amount of the fellowship) may be awarded to students who should be forced to suspend their activity due to illness, maternity or other serious reasons up to 5 months.

• Requirements:

The School welcomes applications from young candidates who are going to complete or soon after completion of their undergraduate studies with a strong interest in research.

To be admitted to the School, candidates must be in possession of one of the following degrees **by 31 October, 2014**:

- Italian **laurea** or **laurea specialistica/magistrale** in a scientific subject;
- A University degree obtained abroad and considered equivalent to the aforementioned Italian degrees by the governing bodies of the School (i.e. M.Sc.).

• **Online application:**

An online application must be filled and sent using the procedure available at the page <http://www.sissa.it/applications> by the deadlines shown in the schedule of each Ph.D course.

Candidates should upload the following documents in pdf format:

- curriculum vitae et studiorum;
- a certificate of University examinations taken (with marks) in one of the following languages: Italian, English, French, German or Spanish;
- a final degree certificate in Italian, English, French, German or Spanish;
- If, at the time of application, candidates should not be yet in possession of a degree certificate, they can submit it at the time of the examination.
European Union candidates can submit a personal declaration instead of the aforementioned certificates.
- a copy of the diploma thesis (if any).

At the end of the procedure, candidates will have to indicate the names and email addresses of two professors that will receive an email requesting to send a recommendation letter through the same online procedure **by midnight of the announcement expiry date**.

A confirmation message will be sent to the candidate when he/she will complete the application process.

The candidate will then have to print out the admission request form, sign it and send it, together with a copy of an ID document (i.e. passport) by email, fax or post to the address on the form itself. The request form must reach SISSA within 8 days from the “online deadline” of each course. Late arrival of the application, for whatever reason, will not be accepted.

All necessary information about the online procedure can be found at the page <http://www.sissa.it/education/phd-courses>

• **Entrance Exams:**

All the information about the exams can be found in the Ph.D schedules attached to the present announcement.

In the framework of the present announcement, a selection reserved to non–EU candidates, based on academic qualifications only, is foreseen.

A contribution towards documented travel expenses with the exclusion of expenses incurred using their own means of transport, of up to a maximum of 150 €, will be given to all candidates who have handed in an examination paper which can be evaluated or to all those participating in the oral exam of the Ph.D courses that provide this kind of exam only.

Interview by videoconference

With regard to the Statistical Physics and the Theory and Numerical Simulation of the Condensed Matter Ph.D courses that provide the possibility to perform the interview by

videoconference or similar technology, the candidate who intends to use this mode of operation, must submit a request using the form "Interview videoconferencing", available at www.sissa.it/applications upon completion of the registration procedure.

The form must contain, under penalty of exclusion of the candidate, the chosen platform (Skype or similar) and the user address that will be then used by the Commission for the video. The candidate must be available at that address, on the day and at the time that will be communicated by the Commission via e-mail.

For identification purposes, and under penalty of exclusion from the selection process, each candidate is required to identify themselves showing the same identity document already uploaded as an attachment to the application before the interview begins.

Failure to give personal address, lack of internet connection, unavailability of the candidate at the expected day/time, or failure to show a valid identification document, shall be reason for exclusion from the selection process. This does not apply if the candidate appears in person on the day and at the time of the interview.

SISSA accepts no responsibility in the event that technical reasons should prevent the proper conduct of the oral examination.

Should objective reasons, duly documented, prevent personal participation in the oral test, the candidate who has not sent a request for interview as an attachment to the application, can send it to protocollo@sissa.it four working days before the date set for the oral examination, enclosing a copy of a valid identity document. The Administration will give notice of acceptance of the request.

• **Admission:**

All those students admitted to the School will receive e telegram confirming their place and fellowship. They will also be asked to be present at the School as follows:

1 October, 2014 for Mathematical Analysis, Modelling and Applications; Astroparticle Physics; Geometry; Mathematical Physics and Theoretical Particle Physics;

4 November, 2014 for all other Ph.D courses.

Failure to do so without a valid reason will result in the loss of the place and fellowship awarded.

In order to be enrolled and to be awarded the fellowship, admitted candidates must pay a "Regional Tax" of the amount of € 140,00 per year. Information will be given by the Students' Secretariat in due time.

The International School for Advanced Studies will respect the reserved nature of the information submitted by the candidates. All the data will be used for the purpose of the competition only and for the eventual fellowship, in accordance with the Italian Legislative Decree 196/2003.

Trieste, February 2014

The Director
Prof. Guido Martinelli

Preselection reserved to non-EU candidates only

Ph.D. Course	Selection Process	Session	Deadline of Online Procedure	Results
Astroparticle Physics Astrophysics Cognitive Neuroscience Functional and Structural Genomics Geometry and Mathematical Physics Mathematical Analysis, Modelling, and Applications Neurobiology Physics and Chemistry of Biological Systems Theoretical Particle Physics	Academic Qualification	Single	31.03.2014	By 30.04.2014

Physics Area – Entrance Exams

Ph.D. Course	Selection Process	Session	Deadline Online Procedure	Exams Dates
Astrophysics	Academic qualifications+oral (Admission to oral with 21/30 on Acad. Qualif.)	First Second	31.03.2014 01.09.2014	29.04 – 30.04.2014 18.09 – 19.09.2014
Physics and Chemistry of Biological Systems	Academic qualifications+written+oral (Admission to written with 7/10 on Acad. Qualif. and to oral with 28/40 on written)	First Second	03.06.2014 09.09.2014	23.06 – 24.06.2014 23.09 – 24.09.2014
Astroparticle Physics	Academic qualifications+written+oral (Admission to written with 7/10 on Acad. Qualif. and to oral with 28/40 on written)	Single	20.06.2014	08.07 – 09.07.2014
Statistical Physics	Academic qualifications+oral (also Skype) (Admission to oral with 21/30 on Acad. Qualif.)	First Second	07.04.2014 01.09.2014	from 09.04 to 15.04.2014* from 03.09 to 09.09.2014*
Theoretical Particle Physics	Academic qualifications+written+oral (Admission to written with 7/10 on Acad. Qualif. and to oral with 28/40 on written)	Single	20.06.2014	10.07 – 11.07.2014
Theory and Numerical Simulation of the Condensed Matter	Academic qualifications+oral (also Skype) (Admission to oral with 21/30 on Acad. Qualif.)	First Second	31.03.2014 01.09.2014	from 05.05 to 09.05.2014 from 24.09 to 30.09.2014*

* **Saturday and Sunday excluded**

Mathematics Area – Entrance Exams

Ph.D. Course	Selection Process	Session	Deadline Online Procedure	Exams Dates
Mathematical Analysis, Modelling and Applications	Academic qualifications+written+oral (Admission to written with 7/10 on Acad. Qualif.) and to oral with 28/40 on written)	Single	01.09.2014	11.09 – 12.09.2014
Geometry and Mathematical Physics	Academic qualifications+written+oral (Admission to written with 7/10 on Acad. Qualif.) and to oral with 28/40 on written)	Single	01.09.2014	10.09 – 11.09.2014

Neuroscience Area – Entrance Exams

Ph.D. Course	Selection Process	Session	Deadline Online Procedure	Exams Dates
Functional and Structural Genomics	Academic qualifications+written+oral (Admission to written with 7/10 on Acad. Qualif.) and to oral with 28/40 on written)	Single	09.09.2014	29.09 – 30.09.2014
Neurobiology	Academic qualifications+oral (Admission to oral with 28/40 on Acad. Qualif.)	Single	09.09.2014	29.09 – 30.09.2014
Cognitive Neuroscience	Academic qualifications+written+oral (Admission to written with 7/10 on Acad. Qualif.) and to oral with 28/40 on written)	First Second	31.03.2014 09.09.2014	23.04 – 24.04.2014 29.09 – 30.09.2014