



Doctoral School

Physique en Île de France – ED 564

PhD student guide

Welcome to the Doctoral School [Physique en Île de France](#). This guide presents the rules of the School and is intended to help you during your PhD. This is your first professional experience of research. As such, you benefit from the rights, and must fulfill the duties, associated with your dual status, as an employee and a student.

I - What is the Doctoral School?

In line with the [Decree of May 25th 2016](#) on doctoral education, and the doctoral charters of its partner institutions¹, the Doctoral School (Ecole Doctorale, ED) organizes the training of its PhD students and prepares them for their future employment. It aims to offer students during their doctorate a multidisciplinary environment both for their scientific project and their professional development.

The Doctoral School *in Physics, Ile de France* is constituted by four universities: PSL, Sorbonne Université (SU), Université de Paris (UP), and Paris-Saclay (UPSaclay). Scientifically the ED is centered on fundamental physics, both theoretical and experimental, as well as applications which arise naturally from it. The scientific fields cover essentially the physics of fundamental interactions, quantum physics of dilute or condensed matter, statistical physics, and the physics of soft or biological matter, as well as fundamental aspects of optics, acoustics, and hydrodynamics.

The ED is run by a board of directors consisting of a director and three assistant directors, who are jointly responsible for the overall functioning of the ED. Each member of the board is responsible specifically for managing relations of the ED with one of the partner institutions, and for monitoring the students in the School at that institution. These are the thus the key persons you will be in contact with during the three years of your thesis:

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| PSL | Frédéric Chevy , Director, Professor at the ENS and member of the Laboratoire de Physique de l'ENS
Assistants: Médina Mahrez and Camille Sardin , Department of Physics at ENS, room GH 210 (01 44 32 -35 60 – 35 65)
Email: edpif.psl@edpif.org |
| SU | Maria Chamarro , Deputy Director, Professor at SU and member of the Institut des Nanosciences in Paris
Assistant: Nadine Yassine , Jussieu Campus, 56-66, 2 nd floor, room 218 (01 44 27 80 39)
Email: edpif.su@edpif.org |
| UP | Philippe Lafarge , Deputy Director, Professor at UPD and member of the Laboratoire Matériaux et Phénomènes Quantiques.
Assistant: Monia Mestar , room 122A, S ^{ce} Formation Doctorale, Building Grands Moulins (01 57 27 61 10)
Email: edpif.up@edpif.org |
| UPSaclay | Véronique Terras , Deputy Director, CNRS research director and member of the Laboratoire de Physique Théorique et Modèles Statistiques
Assistant: Hoarau Sabine , LPS Orsay, room E111 (01 69 15 53 56)
Email: edpif.upsaclay@edpif.org |

The **Council** assists the board of directors in developing the scientific policy and activities of the ED. The Council is made up of 23 members. 12 members are representatives of the scientific community making up the ED, 3 members

¹ see PhD Charters for [PSL](#), [SU](#), [UP](#), [UPSaclay](#)

come from academia external to the ED, 2 from the administrative staff and 2 from the non-academic world. There are also 4 PhD students who are elected to the Council by their peers within each institution. These elections are held every two years. Students are strongly encouraged to take part in these elections and to propose candidates to the board.

II - Beginning of thesis

Enrolling at partner institutions

Doctoral candidates awarded a contract by the ED, or by a doctoral program at one of the partner institutions, enroll at the institution which provided the grant, and which will also be their employer.

PhD students receiving funding from the host institution, or from other sources (notably ENS or Polytechnique students receiving support through specific procedures, foreign student grants etc.), enroll following the rules detailed in the regulations of the Doctoral School. If there is any ambiguity about the institution in which the student should enroll, a decision will be made by the Board of directors of the ED.

Information on registration and re-registration (university entry, establishment of doctoral contract, human resources, etc.) is specific to each institution and is relayed by the ED, and can be consulted on the site of the ED at <https://www.edpif.org/en/parcours>.

Welcome Day

A welcome day is organized by the ED early in the year for new students. This occasion reinforces the initial contact between the new PhD students and the direction of the ED. It is an opportunity to present an overview, both scientific and administrative, of the doctorate, and of the training which is proposed by the ED. There is also a presentation of professional opportunities by representatives of the academic/socio-economic worlds and/or by former doctoral students of the ED. **Your presence at this welcome day is compulsory.**

III – The Thesis Program

Monitoring

The thesis advisor has the primary responsibility for regular monitoring of the progress of the PhD student.

Monitoring of the thesis is, however, also an essential mission of the ED. In this respect the ED's objective is, using procedures which remain fairly light, to minimize the risk of students either abandoning his thesis or extending it over an excessively long time. The approach of the Ed gives each student the opportunity to take stock of their training program, their scientific progress, and their professional development. Each board member is responsible for monitoring the students registered in his/her respective institution.

Specifically, the monitoring procedure is organized as follows (the full schedule may vary slightly from one institution to another):

1. During the first six months of his thesis, each doctoral student chooses a *mentor* (a member of the host laboratory, but not part of the host team). This choice must be validated by the laboratory director, and by the ED. The mentor is not intended to be a second thesis advisor and is not necessarily an expert in the chosen field of research. The student also chooses at this time a *scientific tutor*, who is a person with an expertise in the field of the thesis and thus able to understand its technical aspects. He helps with the scientific monitoring of the thesis, providing an external point of view. The tutor should, preferably, be a member of the ED, but cannot be a member of the host team, nor be a researcher who regularly coauthors articles with a member of the host team. The student is encouraged to make regular contact with his mentor and/or scientific tutor and to share with them any difficulties with the progress or the supervision of his thesis. The mentor and tutor together constitute the *monitoring committee* for the thesis.

2. A few months before the end of the first year:

- The student organizes a meeting with his monitoring committee and his advisor(s) to review the progress to date and future perspectives of the thesis. This meeting must include a part during which the monitoring committee has a discussion with the advisor(s) in the student's absence, and likewise a part during which the monitoring committee has a discussion with the student in the advisor's absence.
- After this meeting the student completes, and transmits to the ED, a questionnaire on his integration into the laboratory, his research, and training activities (both completed and planned).

- The monitoring committee transmits to the ED a report on the meeting, in which it may choose to give specific recommendations for the continuation of the thesis.
- The student has a meeting with the director/assistant director of the ED or a person representing him.

3. A few months before the end of the second year:

- A meeting between the monitoring committee, thesis advisor(s) and the student is organized again.
- After this meeting the student completes, and transmits to the ED, a questionnaire including a part on training, a part on scientific production, and a part on his future professional/employment plans. It also includes a provisional calendar, agreed with the advisor(s), for the final stages of the thesis, the writing of the manuscript and for the thesis defense.
- The monitoring committee transmits to the ED a report on the meeting, giving its recommendations for the rest of the thesis and for the student's registration in their third year.
- The student may eventually meet with the director/assistant director of the ED.

4. Additional meetings of the monitoring committee will be set up for any thesis:

- having specific problems, regardless of their nature,
- extending, exceptionally, to all or part of a fourth year.

Doctoral training

Doctoral training includes the following aspects:

- training through research, in the laboratory, via seminars or conferences, etc.
- scientific training through academic courses, summer schools, etc.
- training in other topics related to teaching, languages, professional development, etc.

The last two parts constitute so-called **complementary doctoral training**. This is a very important aspect of doctoral training, allowing students to acquire new skills for their future careers, within or outside the academic world.

A distinction is made into three types of complementary training²:

1. **scientific training** which is foundational (M2 courses, introduction to software or an experimental technique, etc.) or in-depth (courses organized by the ED, summer schools, courses at the Collège de France, etc.).
2. **broadening training** which broadens knowledge of other areas of physics or other sciences, or of the history of science, the relationship of science to society, scientific media, etc.
3. **methodological training**, or professional methods, which helps strengthen new or acquired skills and provides the keys to professional development.

This last category of training is very often offered by the doctoral institutes at the university level. PhD students are thus encouraged to consult propositions for this kind of training on the websites of the doctoral institutes.

Compulsory training in the ethics of research and scientific integrity also fall into this category.

Every PhD student must do a minimum of 90 hours of training during his thesis. To ensure the required diversity of the training, it is not possible to validate more than 40 hours in any one of the three categories above.

The definition of the training program, which is ongoing and regular, must be driven by the student. It provides an opportunity to initiate a discussion between yourself, your thesis advisor (s) and the ED on your professional objectives, and the knowledge and skills you need to acquire to achieve them.

Your career plan cannot be summed up as "post-doc", given that such a position can necessarily only be a short-term one. Further, even if doing a post-doc is an inevitable stage towards obtaining a permanent position in higher education and research, at very most 50% of graduating PhDs take this route in practice.

² Not an additional doctoral training:

- all parts of the usual scientific life, including seminars and conferences;
- activities related to a doctoral mission, including teaching hours;
- activities undertaken in a personal capacity, such as arts and sports activities.

Information on training (modalities, useful links ...) can be found on the ED website. You are obliged to upload, via your personal page of the website of the ED, certificates attesting your participation in all training. The corresponding hours of participation are noted in the data sheet provided on your page. The assessment and subsequent validation is done annually during the monitoring stages described above.

In your first year you must do a mandatory English test to establish the level of your English. You may be exempted if you have a recent English-language certificate or if you are a native english speaker.

Activities during your thesis

Besides the welcome day reception, the ED organizes scientific conferences each year for all new and second-year doctoral students, as well as thematic days. These events provide students with the opportunity to present their work to peers and colleagues. Students are encouraged to actively participate in the organization of these events.

You are also encouraged to:

- get involved in the doctoral associations at your respective institutions:
SU Association of PhDs at SU Sorbonne and the PRES: [Doc'Up](#)
UP Association of Young Researchers from the University Paris-Diderot: [DIDOCs](#)
U-Psud Association of PhDs and Young Doctors of the University Paris-Sud: [ADDOC](#)
- join scholarly associations (SFP, SFO, etc.) and participate in their annual events.
- participate in the creation of an association of PhDs and PhD students of the ED, who can contribute to the post-graduate professional development of PhDs and facilitate their monitoring.
- get involved in the life of the ED by organizing thematic days and participating in the Council of the ED.

IV - Thesis defense

Regarding the thesis defense, the ED shall ensure that the national rules and the specific rules of each institution are followed. The information relating to the rules for thesis defense for the individual institutions are relayed by the ED. You can find them on the website <https://www.edpif.org/fr/parcours>.

V - After the thesis

In collaboration with the laboratories, the ED ensures the short- and medium-term (at least thesis + 5years) monitoring of the PhDs it has trained. It urges all PhDs to keep a permanent email address and to inform the ED of any change in their employment. The board of directors of the ED encourages the creation of an association of PhDs and PhD students of the ED.