



Institute of Physics

Institute strategy PhD students and programmes

Preamble

The Institute of Physics (IoP), one of the eight research institutes of the UvA's Faculty of Science (FNWI), comprises all physics research carried out at the UvA. Three disciplinary demarcated divisions can be distinguished within IoP: the Institute for High-Energy Physics (IHEF; embedded within Nikhef, the National Institute for Subatomic Physics), the Institute for Theoretical Physics Amsterdam (ITFA) and the Van der Waals-Zeeman Institute for Experimental Physics (WZI). As these institutes until 2011 operated as independent institutes, normal practice slightly differs in some areas. Nevertheless, initial differences in regulations have in the meantime been standardized in unambiguous institute policies, for example in the field of PhD policies.

A fraction of the IoP PhD students work on projects funded by the former Foundation for Fundamental Research (FOM), now integrated within the Dutch Research Council (NWO), specifically the Institutes organisation thereof (NWO-I). Because FOM traditionally did not delegate its role as employer to the university workgroups, these students are registered at the UvA as non-employed staff ('Personeel-niet-in-dienst' or 'PNID'; category NWO-appointed). With FOM/NWO-I as their employer, the collective labour agreement and working conditions of FOM PhD students are different from those of UvA-employed PhD students, but this mostly has little noticeable effect in practice.

For PhD students in research collaborations that transcend the IoP (especially within the UvA research priority GRAPPA, in which the IoP collaborates with the Anton Pannekoek Institute), the policies of the appointing institute apply. A somewhat special situation exists for PhD students within IHEF. As these students are fully embedded within Nikhef, they fall under the regulations and policies of the Nikhef organization. Similarly, PhD students employed at IoP but working at the Advanced Research Center for Nanolithography (ARCNL) primarily follow the regulations and policies at ARCNL. Generally, the IoP aims to avoid situations in which PhD students are disadvantaged because of such double affiliations. When in doubt, the institute management should be able to provide guidance as to which policies prevail.

1. Responsibilities and quality monitoring

The promotor is ultimately responsible for the quality of the promotion. The Principal Investigator (PI) of the research project acts as daily supervisor; this can be the promotor, or a member of staff of the promotor's group. In addition to this research supervisor each PhD student is assigned a second supervisor from another research group at the start of the project. The second supervisor is a contact person for both the PhD student and the main supervisor, and helps to detect problems early on and remedy them. The presence of the second supervisor during the annual interviews ensures that the PhD programme is also reviewed from a wider perspective. Involving an independent investigator in the PhD programme is intended to prevent stagnation of the project, which potentially results in delays and extensions.

Upon appointment of the PhD student, the supervisor and PhD student prepare the Training and Supervision Plan (TSP, or Opleiding- en Begeleidingsplan, OBP), which is evaluated during subsequent progress meetings and adjusted when necessary.

The IoP support office plays a key role by making sure that the supervisor and PhD student prepare the TSP in time, instigating the planning of the annual meetings, supporting the filling out of forms for

the Doctorate Board (College voor Promoties, CvP) and distributing TSPs, meeting reports and other relevant documents to the relevant staff organizations (i.e., the Human Resources department at the Faculty of Science).

For IHEF PhD students embedded in Nikhef the relevant local policy of the Research School Subatomic Physics (OSAF, see also below) applies: a three-member advisory committee 'C3' is set up, comprising the supervisor, second supervisor, and a member of the Education Committee of the research school (not directly involved in the research of the PhD student). Note that the C3 committees are organized within Nikhef, and as such outside the control and scope of the IoP.

In addition to the above, the regulatory guidelines of the Doctorate Regulations with respect to the composition and functioning of the PhD committee offer sufficient assurance of the quality of the dissertation.

2. Research schools

The IoP participates in two research schools, namely:

- Dutch Research School for Theoretical Physics (DRSTP, or Landelijke Onderzoeksschool Theoretische Natuurkunde, LOTN; see web.science.uu.nl/DRSTP). All PhD students working under supervision of ITFA researchers fall under LOTN.
- Research School Subatomic Physics (Onderzoeksschool Subatomaire Fysica, or OSAF; see www.nikhef.nl/activiteiten/onderzoeksschool). All PhD students working under supervision of IHEF researchers, who are hence embedded at Nikhef, fall under OSAF. UvA, VU, UU RU and NWO/Nikhef participate in OSAF.

Both research schools provide a substantive education programme coordinated by an education committee in which the UvA is represented at all times.

The PhD students working in the WZI division have not been part of a research school ever since the research school status of COMOP (Condensed Matter and Optical Physics) was terminated. Nevertheless, the educational component of these PhD projects is secured through the respective TSP's. Education in these cases is provided, for example, through participation in topical winter or summer schools.

In the past years, the Faculty of Science has made significant steps in setting up a soft-skills training programme for PhD students (see also below), thereby increasingly playing the role of a research school.

3. Recruitment and selection

For the recruitment and selection of candidates for PhD projects the IoP follows the following procedures:

- Recruitment is done through various the UvA websites (UvA, Faculty of Science, IoP, research group), Academic Transfer and LinkedIn, as coordinated by the IoP support office with the Human Resources department of the Faculty of Science.
- The project description is written under responsibility of the prospective supervisor. In general, it follows the description of an externally funded project.
- If a good internal candidate is available (for example a master student), (s)he can be appointed at the request of the prospective supervisor, assuming the case can be made that no more suitable external candidates are expected to be found.

- In all cases a curriculum vitae and a letter of motivation is asked for; it is up to the supervisor whether or not to ask for a letter of recommendation.

The selection of candidates is at all times the responsibility of the supervisor(s). This also includes inviting candidates and possibly setting up a selection committee. If desired, the rejection of non-selected candidates can be coordinated by the IoP Secretariat.

4. Training

In the first 1-3 months of the PhD programme, the PhD student prepares a Training and Supervision Plan (TSP, or Opleiding- en Begeleidingsplan, OBP) together with his/her supervisor. The Faculty of Science has developed a template for this which can be used. In this plan it is detailed who will be the first and second supervisor, and also which types of training the PhD student will follow. Training involves the following categories:

1. Educational/didactical skills: prior to involvement in education as teaching assistants PhD students are trained in teaching skills through a compulsory, compact course module.
2. Academic skills: course modules covering general academic skills, such as project management, presentational and writing skills. These courses are organized and coordinated by the FNWI Career Services.
3. Specialist training: these training components are largely offered in the context of the research school and are further secured by participation in (mostly international) summer and winter schools, workshops and conferences, and in some cases also in specialised course modules of the Master's programme Physics. This category also includes the specific lab safety instructions given to the PhD students in experimental physics by their supervisor and/or colleagues.
4. Career prospects: training courses aimed at preparing for the job market. This is coordinated by FNWI Career Services, and also covered by the annual Amsterdam Physics and Astronomy Career Days organized by IoP, API and the VU department of Physics & Astronomy.

In some cases, PhD students are offered the possibility to independently identify relevant course modules, for which the IoP can supply a financial contribution in case the research group is lacking funds.

For non-Dutch PhD students (as well as postdocs and permanent staff), the IoP offers an in-house Dutch training at all levels (A1-C2) to which participation is free of charge.

5. Teaching

Besides taking part in training, every PhD student is expected to contribute to teaching. As little distinction as possible is made as to the nature of the appointment (UvA, NWO-I, scholarship), embedding (Nikhef, Faculty of Science) or background (Dutch, non-Dutch) of the PhD student: in principle all PhD students are requested to contribute at most 24 ECTS to education. For PhD students within WZI, who are also involved in the daily supervision of BSc and MSc internships, this is in practice limited to 18 ECTS. The PhD student has a say in the distribution of educational efforts over his/her contract duration and can indicate courses of preference.

6. Supervision and assessment

The shape and intensity of the daily supervision of the student depends in part on the research project; there are typically differences in the supervision of theoretical and experimental research projects. In all cases there is frequent contact between the PhD student and his/her supervisor(s). In this respect IoP has not drawn up local policies in addition to existing policies.

As described in the "Responsibilities and quality monitoring" section, each PhD student (except IHEF-students) has a second supervisor from another research group. The role of the second supervisor is that of contact point for both the PhD student and the first supervisor and serves to signal problems at an early stage.

Periodic assessment and progress meetings, the planning of which is instigated in general by the IoP support office, take place in the presence of at least the PhD student, supervisor and second supervisor. During these meetings the following topics are addressed:

- how the PhD student develops as a scientist;
- training arrangements to be made for that purpose;
- (in the transition to the final year) the wishes and opportunities for the PhD's post-graduate career.

As described below, the IoP PhD/postdoc council plays an important role in the social bonding with and familiarizing PhD students within the institute.

7. Facilities

The IoP provides every PhD student with adequate office space. A computer is made available in the form of a desktop or (mostly) a laptop. Depending on the type of funding (UvA or external) the computer's configuration is determined in consultation with the supervisor (and the person responsible for the budget, in case of externally funded research projects).

The IoP Secretariat acts as intermediate in finding (temporary) housing accommodation for foreign PhD students, coordinated by the UvA International Housing office.

8. Position of scholarship students

Sometimes a potential PhD student comes forward with a scholarship obtained by him/herself. If the profile of the candidate meets the research programme of the prospective supervisor, a host agreement is drawn up with the candidate after consent of the institute Director and the IoP Management. Although formally without an employer-employee relationship, these scholarship students are treated equally to other PhD students as much as possible. For example, it is expected that they contribute equally to teaching, unless the contractual terms of the scholarship organization prevent this.

9. IoP PhD/PD Council

Modelled after the Faculty PhD Council and following several other research institutes, the IoP has founded its [own PhD/postdoc council](#). This council consists of representatives of PhD students and postdocs of the IoP¹ and serves as contact point to the IoP Director and Management for all policy matters concerning the PhD students and postdocs. The council meets biweekly with the Director and Institute Manager. In addition to active participation in policy issues, such as the recent introduction of the second supervisor in PhD programmes, the PhD/postdoc council plays a key role in facilitating and organizing both content-related and social activities within the institute:

- Welcome mail for new PhD students;
- Monthly drinks for PhD students and postdocs;
- Monthly Pizza lunch seminar;
- Periodic football tournaments;
- Annual IoP barbecue;
- Career lunches in cooperation with Chiat Cheong / FNWI Career services

¹ In view of the embedding of IoP-IHEF PhD students in Nikhef, which has its own [Nikhef PhD council](#), these students have not been represented by the IoP council up till now.

10. Support

It is important that the PhD students can rely on a wide array of support options if they face any problems, including (mental) health problems. The students are encouraged to talk to their colleagues, supervisor, second supervisor, the IoP PhD/PD council, the secretariat, and/or Institute Manager Joost van Mameren.

Outside the IoP the UvA has multiple official support options for different types of problems. This includes:

- [Confidential advisors](#) for problems relating to undesirable behaviour;
- [‘Ombudsperson’](#) for diversity and inclusion;
- [Psychologists](#) for mental health;
- [ARBO](#) (occupational health and safety service) for work conditions;
- [ProActief UvA](#) for career guidance;
- [FNWI Career Service](#) for future career guidance.

11. Compensation

For PhD students on externally funded projects for whom there is no budget available for **travel, training and other expenses** (often in the form of a "bench fee"), IoP covers such costs made within reasonable bounds. Specifically, the printing costs associated with the PhD thesis are supposed to be covered by the project budget if available (and otherwise by the institute). The institute provides a maximum of Eur 600 as compensation for the costs associated with the ceremony (e.g. for the cloakroom and catering costs, the party).

12. Implementation of the strategy

All the elements of this document are part of the current IoP policies. Some policies, such as the introduction of the second supervisor, were developed in close consultation with the PhD/postdoc council. Communication with the scientific staff about these and other PhD policy issues is done in regular staff meetings and via e-mail.