



## Statutes of the IMPRS-HD

### **Preamble**

The *International Max Planck Research School for Astronomy & Cosmic Physics at the University of Heidelberg* (IMPRS-HD) is a PhD program that is a joint endeavour of Heidelberg University and the Max Planck Society. It is an independent branch of Heidelberg University's Graduate School for Physics (HGSFP) and is coordinated by the Max Planck Institute for Astronomy within the Max Planck Society (MPG).

The IMPRS-HD was established in 2004 with the first IMPRS fellows arriving in 2005.

Four astronomy institutions take part in the IMPRS-HD: the Center for Astronomy of Heidelberg University, ZAH, (consisting of the Astronomisches Rechen-Institut, ARI; the Institut für Theoretische Astrophysik, ITA; and the Landessternwarte Königstuhl, LSW), the Max Planck Institute for Astronomy, MPA; the Max Planck Institute for Nuclear Physics, MPIK; the Heidelberg Institute for Theoretical Studies, HITS.

These bylaws articulate the basic structure and ground-rules of the IMPRS-HD.

# 1. IMPRS Organisation

## 1.a. IMPRS Board of representatives (IMPRS Board)

All major decisions about the use of IMPRS-HD funding, the course program, and major personnel selections will be taken by the **IMPRS-HD Board**. Board members are

- (i) the two IMPRS spokespersons,
- (ii) four representatives of the supervisors, one for each of the four participating institutions.
- (iii) four elected student representatives (one for each active student generation),
- (iv) the coordinator of the astronomy lecture program at Heidelberg University,
- (v) the HGSFP representative for the graduate school's astronomy branch,
- (vi) the IMPRS coordinator.

The duties of the IMPRS Board are:

- to monitor and evaluate the state of IMPRS,
- to further develop IMPRS and decide on its curriculum (Annex D),
- to decide about the general funding available for the IMPRS, including extraordinary expenses such as bridge funding,
- to decide about the IMPRS fellowship guidelines (Annex F),
- to make final decisions on any challenged sanctions or suspensions,
- to decide on any changes to the bylaws including the terms and conditions (Annex A and B) and, the supervision guidelines (Annex C) and
- to make all other decisions that are not given to any other person or entity by the IMPRS statutes.

All decisions by the Board must be consistent with the legal boundary conditions and existing policies of Heidelberg University and the Max Planck Society.

A quorum of 50% of the members of the IMPRS Board needs to be present to make any decisions. Furthermore at least one IMPRS Student Representative and one IMPRS Supervisor Representative must be present.

Any decisions made by the IMPRS Board need to have 50% or more of approval both among the attending members of the IMPRS Board who are PhD candidates, and among the members who are not.

If a quorum is not reached, then a second meeting is held for that agenda point at which no quorum is necessary.

#### 1.b. IMPRS Coordinator

The IMPRS coordinator is employed by MPIA. Their duties are the daily operations of IMPRS. The IMPRS coordinator is aided by the IMPRS assistant who supports the coordinator in organizational and administrative tasks. Together they form the IMPRS office.

The duties of the IMPRS office include the organization of

- seminars and retreats,
- summer schools,
- social events,
- elections of the IMPRS Student Representatives,
- preparation of and invitation of its members to the IMPRS Board meetings,
- the application and selection process for all IMPRS members (Annex E) and
- sanctions against IMPRS members who do not follow the applicable terms and conditions.
- maintenance of the IMPRS-HD webpage
- arrival procedures

Furthermore the coordinator is responsible for monitoring the IMPRS budget and making decisions on (travel) grants.

The coordinator also serves as a contact for all IMPRS students regarding any problems that may arise during the PhD, or questions about university procedures.

#### 1.c. IMPRS Spokespersons

The IMPRS Spokespersons are two official representatives of IMPRS-HD. One of the spokespersons has to be from

1. the Max Planck Institutes within IMPRS-HD and the other one from
2. any other institute within IMPRS-HD.

#### 1.d. IMPRS Student Representatives

The IMPRS students are represented by the four IMPRS student representatives, one from each generation.

Each generation elects their representative among themselves. Anyone from the respective generation can be elected as long as they do not declare before the election that they do not want to be on the candidate list. Representatives are elected for a period of one year for the first two elections, and for the period of the remaining year(s) for the third election.

The vote has to be free, equal and secret and is to be organized by the IMPRS coordinator early during each one of the first 3 winter semesters. Each voter can cast a vote for two candidates but a maximum of one vote per candidate.

The candidate who received the largest number of votes is elected IMPRS Student Representative. The person with the second largest number of votes automatically becomes the Deputy IMPRS Student Representative of the respective generation.

In case the respective Student Representative is (temporarily) unable to fulfill all of his/her duties, the Deputy Student Representative assumes these. In case multiple people receive the same, highest or second highest number of votes they are requested to settle the issue between themselves and determine who becomes (Deputy) Student Representative. If this is not possible a run-off vote is to be held.

The duty of the IMPRS Student Representatives is to

- foster a healthy exchange between the students (especially within their generation),
- support the IMPRS coordinator with a student's perspective,
- support the IMPRS coordinator in planning the retreats,
- support the IMPRS coordinator and respective student in cases of conflict between a student of the respective generation and a supervisor,
- communicate significant information or changes in IMPRS with the PhD candidates and
- participate in the IMPRS Board Meetings.

#### 1.e. IMPRS Institute Representatives

The PhD supervisors within IMPRS are represented by the four IMPRS Institute Representatives, one from the MPIA, one from MPIK, one from ZAH, one from HITS.

The respective group of supervisors can choose their representatives among themselves in whichever way they like and for a duration of their choice.

The duty of the IMPRS Institute Representatives is to

- foster a healthy exchange between supervisors,
- support the IMPRS coordinator with a supervisor's perspective,
- support the IMPRS coordinator during the application process,
- disseminate pertinent IMPRS information to other supervisors, and
- participate in the IMPRS Board Meetings.

## **2 IMPRS Membership**

The IMPRS-HD has two groups of members

1. Doctoral students (IMPRS students)
2. Supervisors of these students

There are two sets of terms and conditions (one for each group of members), which are decided by the IMPRS-HD Board. The terms and conditions can be found in Annex A (doctoral students) and B (supervisors) to this document. In general, membership procedures and issues are managed by the IMPRS coordinator.

Members who do not follow the applicable terms and conditions can be sanctioned or suspended from IMPRS-HD by the IMPRS coordinator, after consultations with the Board. All such measures must be consistent with the legal boundary conditions and the policies of the participating institutions.

The measures taken by the coordinator, especially their legality, can be challenged by the affected member within two weeks of the information about them. In this case the measures do not come into effect until the IMPRS Board's re-examination of the issue and final decision.

Membership of doctoral students starts with the acceptance by the IMPRS Coordinator after a successful application process (compare Annex E), based on a membership form, signed by student and main supervisor.

Membership of supervisors starts after the supervisor has informally asked the IMPRS coordinator and their decision to accept the supervisor into the program.

Membership of doctoral students automatically ends with the granting of their doctoral degree, or the final decision not to further pursue this path. After a successful doctoral examination IMPRS students are considered IMPRS alumni.

The IMPRS PhD students are grouped into groups called 'generations', depending on the starting date of their PhD. Due to the program structure of IMPRS (doctoral studies up to four years) there are four active IMPRS generations at any point in time.

In the present context, the term "IMPRS supervisor" refers only to the formal and responsible supervisor of the doctoral candidates. It is understood that others may be involved in co-supervision or day-to-day supervision and collaboration of the PhD candidates.

On a case-by-case decision, the IMPRS Board may consider accepting supervisors and thus a student for the IMPRS who are located at Heidelberg institutions that do not themselves participate in the IMPRS-HD. In such cases the thesis research topic should match well with the research scope of the IMPRS-HD.

It is the IMPRS supervisor that is foremost responsible for the academic success and the financing of the doctoral candidates within the IMPRS-HD.

### **3 Relation towards university bodies**

#### **3.a. Heidelberg Graduate School for Physics (HGSFP)**

IMPRS-HD is integrated in the existing framework for graduate education at Heidelberg University. As such the IMPRS-HD represents the "astronomy branch" of the HGSFP. The administration of IMPRS students concerning PhD registration, examination, and teaching duties will be handled by the HGSFP. A limited amount of financial resources from HGSFP is available for the IMPRS-HD students. The IMPRS-HD is an *independent* part of the HGSFP. This also implies that the IMPRS-HD (with its Board of representatives from all institutes) decides independently on IMPRS-internal issues. The close collaboration with the HGSFP ensures that the IMPRS-HD program fits well into the framework established by the Department for Physics and Astronomy.

Supervision guidelines for the HGSFP, set up by the students themselves, elaborate on expectations on advisors and students

The IMPRS selection panel evaluates all astronomy applications and defines the shortlist of the best applicants. In addition, the applications received via the HGSFP are also reviewed by the IMPRS selection panel and included in the shortlist. The shortlist is then reviewed by the Promotionsausschuss and checked for compatibility with the acceptance criteria of the Department

### 3.b. Heidelberg University Graduate Academy

The Graduate Academy is the central coordinating body for all support services related to general advising, professional and academic development and financial assistance for doctoral candidates at Heidelberg University. The Graduate Academy's mission is, in cooperation with the University faculties and graduate schools, to ensure that doctoral candidates in Heidelberg receive high quality education and training and thereby to strengthen the University's position in competition for the best young researchers.

The seminar program of the Graduate Academy supports doctoral candidates in developing the skills and in obtaining the qualifications necessary to successfully accomplish their dissertations and to develop professional perspectives for their career in academia or in the private sector.

Beside the open course program for which doctoral candidates can register individually, they organize courses for structured doctoral programs.

## **4. Final clause**

These bylaws were established by a vote of the IMPRS-HD Board at 12.01.2026.

## **ANNEX A: Terms & Conditions for PhD Candidates**

A membership in IMPRS-HD as a PhD Candidate comes with the following terms and conditions.

### Requirements:

- Fulfill all the requirements for HGSFP submission
- Interest and willingness to complete a PhD in Astronomy or Physics (with a focus on Astrophysics) at the University of Heidelberg (exceptions to the choice of University may be granted).
- Have a PhD supervisor who is an IMPRS member. This is typically done within the IMPRS application process. In exceptional cases, it is also possible that not the primary but only a secondary supervisor is part of IMPRS.

### Duties:

- Follow the IMPRS curriculum
- Follow the IMPRS supervision guidelines
- Be willing to supply the IMPRS coordinator with information about the PhD project and have it published on the IMPRS homepage
- Complete the teaching duties in accordance with the University requirements

### Benefits:

- Broad education in astrophysics education through the IMPRS seminars, retreats and network
- A framework for a successful PhD, including counseling and mediation in cases of conflict with the supervisor
- Certificate of participation after successful participation in IMPRS
- Travel grants during the membership in IMPRS. Grants and their height are subject to availability and may change over time. Applications for travel grants are to be addressed to the IMPRS Office no less than 2 months before the planned travel and must contain the reason for travel, a short financial plan for the trip and a statement of support from the primary supervisor.
- Access to Membership in the Heidelberg Graduate School for Physics (HGSFP) and access to its programs and grants.

## **Annex B: Terms & Conditions for PhD Supervisors**

A membership in IMPRS-HD as a PhD supervisor comes with the following terms and conditions.

### Requirements:

- Fulfill the requirements to supervise a PhD candidate (compare § 5 (1) g of the “Promotionsordnung der Universität Heidelberg für die Gesamtfakultät für Mathematik, Ingenieur- und Naturwissenschaften” and § 2 (1) of Satzung der “Heidelberger Graduiertenschule für Physik (Heidelberg Graduate School for Physics)”). In exceptional cases the IMPRS Board can allow for deviations from these rules, especially if one can assume that a potential member will fulfill these requirements in the near future.

### Duties:

- Actively supervise at least one IMPRS PhD candidate or indicate willingness to do so in the foreseeable future.
- Follow the IMPRS supervision guidelines. This especially includes a formation of a Thesis Committee (TC) for each IMPRS PhD candidate, organisation of regular (at least yearly) TC meetings, and the forwarding of copies of the respective protocols to the IMPRS office.
- Be in a position to effectively and fully take on the role of a supervisor, including the time and willingness to supervise and the ability to secure (directly or indirectly) the funding for their supervisee.
- On request assist the IMPRS coordinator as a tutor or co-organizer for the IMPRS seminars and the IMPRS retreats.

### Benefits:

- Get exclusive access to the IMPRS Application process and potential PhD students
- A framework for supervision and counseling and mediation in case of a conflict between supervisor and PhD candidate.
- Travel grants for IMPRS PhD students during the membership in IMPRS. Grants and their height are subject to availability and might.

In case of a non-compliance with these Terms & Conditions the IMPRS Coordinator can sanction the respective member. Possible sanctions are especially:

- (temporary) exclusion from the IMPRS application process,
- an exclusion of the supervised students from the IMPRS travel grant program or
- a suspension of the membership in IMPRS.

## **Annex C: Supervision guidelines**

The goal of supervision of PhD students is to provide them with a solid framework and assistance to finish a high-quality dissertation within an appropriate time frame.

It is the duty of the PhD supervisor to ensure that the supervision guidelines are followed. In case the PhD candidate sees the supervision as insufficient they are asked to report to the IMPRS Coordinator and/or their generations IMPRS Student Representatives. The IMPRS Coordinator can also take action themselves if insufficient supervision is suspected.

The supervision is split into four phases:

### 1. Preparatory phase

Before offering a position as a PhD candidate in IMPRS the supervisor has to:

- specify the area of research.
- have a plan on how to ensure proper funding for the whole agreed duration of the PhD project.

Only once these points are settled the PhD position can be offered.

Furthermore before the start of the PhD the employment contract and its modalities have to be agreed on and signed as well as the scope of the PhD project lined out.

### 2. Beginning of the PhD (first 6 months of the project)

During this period the supervisor has to give special attention to the PhD student and their project. Supervisor and student are recommended to come up with and agree on a list of expectations.

In accordance with § 6 of the “Promotionsordnung der Universität Heidelberg für die Gesamtfakultät für Mathematik, Ingenieur- und Naturwissenschaften” a written agreement on the PhD project (“Promotionsvereinbarung”) is developed and signed by both the PhD candidate and the supervisor.

Furthermore the supervisor has to propose qualified members for a Thesis Advisory Committee (TAC) to the PhD candidate. However the student makes the final decision on the members of the TAC and asks them for their availability.

Within this phase the first TAC Meeting takes place and the protocol of it is sent to the IMPRS Office by the supervisor.

### 3. Project phase

During the project phase the supervisor is expected to support the PhD candidate in their research. This especially includes:

- regular exchange with the PhD candidate about the progress of their PhD project and their wellbeing,
- assistance to the PhD candidate by proposing suitable and beneficial lectures, seminars, summer schools and conference and if necessary securing or providing funding for such,
- encouraging and enabling the student to publish their work in a suitable context (e.g papers proceedings, etc) and
- providing them with the proper resources (financially, equipment, lab, a laptop and office space) to bring the PhD project to success.

Furthermore it is the supervisor's responsibility to ensure the TC meetings take place regularly (at least yearly) and the respective protocols are sent to the IMPRS Office.

#### 4. Final phase (last 6 months)

During the last 6 months the supervisor is asked to put a special focus on helping the PhD candidate to find a position after the completion of their PhD.

Furthermore, the supervisor must provide the PhD candidate with sufficient time to write their thesis. This especially includes keeping the PhD candidate clear of too many additional teaching duties, duties to the institute or the working group. Additionally, a sufficient time frame of no less than 3 weeks should be granted to prepare for the defense.

Supervision ends with the granting of the doctorate to the PhD candidate by the University.

#### The IMPRS Thesis Committee (TC)

The TC is formed to assist the PhD candidate during their research. It consists of at least:

- the main supervisor
- two co-supervisors

The co-supervisors are required to at least hold a PhD. Furthermore, at least one of the co-supervisors should be from an area close to the area of research of the PhD project.

It is also compulsory that at least one of the co-supervisors is not strongly dependent on the primary supervisor. Up to two additional members can be added to the TC.

Duties of the TC are especially:

- discussion and definition of the PhD project together with the PhD candidate
- selection of and agreement on the individual curriculum for the PhD candidate in agreement with the IMPRS curriculum.
- to provide assistance to the PhD student in research related questions
- to assist the PhD candidate whenever problems arise.
- to (re)evaluate the PhD candidate's work plan and advise on how to proceed.

Furthermore the 'external' person in the TC has the duty of mediating in cases of conflict between the supervisor and the PhD candidate and to provide an independent perspective on any conflicts. They additionally should provide a critical view on the project outline and timeline of the PhD project especially whether they believe in a timely completion of it.

A thesis committee is also required for the registration at the HGSFP, as an implementation of and in agreement with § 6 (2) of the "Satzung der 'Heidelberger Graduiertenschule für Physik (Heidelberg Graduate School for Physics)". The university department requires that at least one of the TC members is a professor or lecturer at Heidelberg University, and thus have the permission by the Dean's office to supervise students. This person will be the "formal" supervisor if the main supervisor does not have this permission.

The IMPRS TC meets at least once a year. The first meeting must be shortly after the arrival of the student. For each meeting a protocol is to be written by the TC for reference for the student and the TC (use of the attached template (to be modified) is highly encouraged) and a copy has to be sent to the IMPRS Office.

It is the supervisors responsibility to ensure the TC meetings are held and the protocols sent.

Furthermore, a doctoral thesis done at a Max-Planck-Institute has to follow the MPG's "Guidelines on the Training of Doctoral Students at the Max Planck Society".

## ANNEX D: Curriculum

The IMPRS curriculum aims at providing PhD candidates with a solid background knowledge in Astronomy and Astrophysics. It is identical for all PhD candidates independent of whether they pursue a PhD in Physics or Astronomy.

### Mandatory:

- Introduction to Astronomy & Astrophysics I+II (September block course)
- Theoretical Astrophysics (semester course, every winter term)
- IMPRS literature seminar (1st semester)
- IMPRS research seminar (2nd semester)
- IMPRS seminar workshop (3 days block as a retreat in the 2nd year)
- One IMPRS Summer School or another (Summer/Winter) School.

### A choice of no less than two of the following courses:

- Observational Methods
- Stellar Astronomy & Astrophysics,
- Galactic & Extragalactic Astronomy
- Cosmology

The attended lectures need to be outside of the PhD student's research area. The choice of lectures needs to be agreed on by the thesis committee.

Exams on lectures or exercises are not required unless recommended by the thesis committee, or imposed by the HGSFP requirements for acceptance.

Furthermore, in accordance with Anlage 2 zu § 6 Abs. 3 of the "Promotionsordnung der Universität Heidelberg für die Gesamtfakultät für Mathematik, Ingenieur- und Naturwissenschaften" a number of **16 SWS** (this is a german system of points you get for each lecture) needs to be completed. This requirement is however usually satisfied if all courses of the IMPRS curriculum are attended.

For doctoral candidates pursuing a degree in Astronomy it is furthermore mandatory to attend the astronomy lab course.

If certain courses (or similar) have been attended by the student before, the respective course of the IMPRS curriculum does not need to be attended. The acknowledgement of respective courses is done by the IMPRS student's TC.

## **ANNEX E: Application Procedures**

The IMPRS Application process is organized by the IMPRS Coordinator.

The application process aims at selecting the best-suited candidates for a participation in IMPRS. This is ensured by eliminating biases (especially gender, nationality and ethnicity) and conflicts of interests wherever possible. Furthermore each application is reviewed by at least three people to lower the impact of individual decisions.

IMPRS-HD calls for applications once a year. The IMPRS office collects all applications and compiles a list of all applicants. Each institute nominates members of a “shortlist committee” which together with the IMPRS coordinator reviews the application. From their vote the IMPRS coordinator compiles a shortlist of the most suitable candidates, who are then informed about their status.

Afterwards the shortlist is passed on to all potential IMPRS supervisors, who inform the IMPRS Office which candidates they want to interview.

Before the interviews, shortlisted candidates (all, or only those selected by supervisors for interview) are cross-checked with the “Promotionsausschuss” about compatibility with the rules of Heidelberg university (quality and completeness of their physics education). Only compatible candidates can be invited for an interview.

The candidates are then invited to interviews by the IMPRS coordinator. Time scheduling is coordinated by the IMPRS office, but requires active collaboration with the supervisors. Candidates must not be contacted by a supervisor without informing the IMPRS coordinator.

The Interview typically consists of a presentation by the candidate followed by an interview. The supervisor then compiles a (ranked) list of suitable candidates for the open position and sends it to the IMPRS Office.

After being presented with the offers for PhD positions by the IMPRS Office the applicant needs to inform the IMPRS Office about their acceptance of the offer for the position.

Apart from PhD candidates who apply through the yearly Application Process, students who were accepted by IMPRS Supervisors through any other mode of application can become a member of IMPRS if they fulfill the requirements. The IMPRS Coordinator decides about their acceptance as a member of IMPRS.