



2. Co-Supervisor:
3. Ancillary Supervisor:
4. Ancillary Supervisor:

### 3

#### **TAC Formation Schedule**

The doctoral candidate and the supervisor agree on and specify at least one other TAC member at the time of signing the supervision agreement. Additional TAC members should be specified no later than 6 months after the supervision agreement was signed.

### 4

#### **Topic of the Doctoral Thesis and Schedule**

- a) The doctoral candidate will produce a doctoral thesis with the working title "e.g. Data analysis for ground based gravitational wave detectors"
- b) The doctoral thesis should be written in English.
- c) The project is described in the following sketch:

The project is envisaged to last 36 months, and IMPRS-GW will provide personal funding and the necessary resources and equipment for at least this period. For the maximum duration of the PhD thesis, we are bound by the guidelines for good supervision of Leibniz Universität Hannover [6]. IMPRS-GW intends to provide funding for the entire duration of the PhD thesis as long as satisfactory progress is visible.

### 5

#### **Responsibilities of the Supervisors and the Doctoral Candidate**

- a) The supervisors that form the personal TAC of each doctoral candidate shall advise the doctoral candidate on the independent preparation of the doctoral thesis, in particular by:
  - giving recommendations on the research problem, design and on any problematic issues,
  - discussing and assessing hypotheses and methods,
  - discussing results and their interpretation,
  - encouraging participation in scientific conferences and scientific publications, depending on available funds,
  - enabling research experience and providing the infrastructure required (e.g. office space, access to laboratories and research data),
  - supervising and advising on the structure and presentation (language, layout) of the doctoral thesis.
  - Additionally the TAC may advise the doctoral candidate with regard to career planning and professional development.
- b) The doctoral candidate and the TAC members shall meet on a regular basis, i.e. at least once a year, to discuss the progress of the candidate's work, chapters of the thesis and/or special topics. TAC

members can also participate via video or telephone conference if necessary. Important agreements and results of these discussions have to be documented. The candidate shall prepare brief minutes of the essential agreements, such as modifications to the work and time schedule or methods. The minutes have to be signed by the supervisors. They will become part of this agreement.

- c) Beyond that, the doctoral candidate shall report regularly on his/her progress. These informal meetings are expected to take place at least once per semester and the doctoral candidate shall also have the opportunity to meet with individual TAC members separately.
- d) After a period of two years following the date on which the supervision agreement was made, the doctoral candidate shall submit a detailed schedule for the planned completion of the doctoral thesis to the TAC. This will be renewed after three years, and if necessary after four years.
- e) The doctoral candidate pledges to make use of the provided mentoring services while working on the doctoral thesis as scheduled and to keep regular contact to the TAC.
- f) The doctoral candidate will participate in the educational programme offered by the IMPRS-GW, in particular the lecture weeks and the transferable skills courses.

## 6

### **Special Measures for Reconciling Personal Life and Research Work**

The supervisor has to consider special commitments of the candidate, in particular the balance of personal life and academic work, as far as time management, work on the topic, and the organization of the doctoral procedure are concerned. The doctoral candidate has to inform the supervisor when such a situation arises.

## 7

### **Settlement of Disputes**

- a) If conflicts arise between one or more parties involved in this agreement, which threaten a continued atmosphere of cooperation and trust and which seem unresolvable, then one or more of the concerned parties may appeal to the coordinator of the IMPRS-GW or the dean of the Fakultät for Mathematics and Physics (or Leibniz Forschungsschule, whatever applies). If the concerned parties are the coordinator of the IMPRS-GW and/or the dean, the appeal shall be made to the board of the Fakultät or of the Leibniz Forschungsschule. Alternatively, the concerned parties can also appeal to the independent arbitration board of the Graduate Academy of Leibniz Universität Hannover [8].
- b) In the event that the doctoral thesis is abandoned, written explanations will be provided to the coordinator of the IMPRS-GW and the dean. In the event that the supervision relationship is dissolved, or one or more TAC members cannot continue to perform their duties, the speaker of the IMPRS-GW will help to find a new supervisor and/or TAC members and to establish an alternative supervision agreement.

## 8

### **Severability**

Should one or several provisions of this agreement prove to be invalid, in whole or in part, the validity of the other terms remains unaffected.

## 9

### **Additional Regulations and Scope of this Agreement**

- a) The TAC members and the doctoral candidate confirm that they acknowledge the University's doctorate degree regulations and the guidelines for a good supervision of PhD candidates at Leibniz Universität Hannover, and DFG's rules of good scientific practice as part of this agreement and will act in accordance with the provisions contained therein.
- b) The doctoral candidate and the TAC members agree to comply with the rules of good scientific practice as stated in the preamble. This includes consultation on the part of the doctoral candidate with the TAC

members or other trusted persons in situations or instances in which she or he has doubts or concerns. This explicitly includes the obligation to respect and acknowledge the copyright obligations and rights related to texts and knowledge developed by the doctoral candidate.

- c) All parties concerned agree that data of a non-personal nature related to the project, like working plans, meeting minutes, measurement data, software source code, construction drawings, electronics layouts, etc. need to be archived at the *Institute for Gravitational Physics* and will become part of the corporate knowledge base of the institute.
- d) In case of a conflict between the work contract of the doctoral candidate and the supervision agreement, the work contract will prevail.

## 10 Signatures

Hannover, (Date)

NN (Doctoral candidate)

---

NN (Supervisor)

---

NN (Co-supervisor)

---

NN (Ancillary Supervisor)

---

NN (Ancillary Supervisor)

---

NN (Speaker of IMPRS-GW)

---

NN (Dean, Fakultät für Mathematik und Physik, or QUEST Leibniz Forschungsschule)

---

## 11 References

- [1] [http://www.maphy.uni-hannover.de/fileadmin/maphy/pdf/Promotion/rer\\_nat\\_prom\\_01.pdf](http://www.maphy.uni-hannover.de/fileadmin/maphy/pdf/Promotion/rer_nat_prom_01.pdf)
- [2] [https://www.maphy.uni-hannover.de/fileadmin/maphy/pdf/Promotion/rer\\_nat\\_prom\\_01.pdf](https://www.maphy.uni-hannover.de/fileadmin/maphy/pdf/Promotion/rer_nat_prom_01.pdf)
- [3] [http://www.dfg.de/formulare/1\\_90/1\\_90.pdf](http://www.dfg.de/formulare/1_90/1_90.pdf)

English translation: A supervision agreement should establish a transparent relationship between doctoral candidate and supervisor as regards both content and time. The independent planning and execution of the doctoral work should be such that the structured cooperation between supervisor and doctoral candidate enables the project to be completed with high quality and within a reasonable timeframe. A supervision agreement should include at least the following aspects:

- Participants (doctoral candidate, supervisor, possible further mentors and other participants),
- Subject of the doctoral thesis (and title of the thesis)

- Structured time and work plan of content and its further development,
- Duties and obligations of the doctoral candidate: regular reporting requirements (credits, participation in the qualification program/scientific training,...), regular submission of partial results.,
- Duties and obligations of the supervisor: Regular expert advice, support of early scientific independence, career development/mentoring, quality control (regular progress checks, ...)  
Note: the obligation to provide supervision until the end of the doctorate is independent of the duration of the financing of the doctorate.
- Integration into a working group, a research network or a graduate program (graduate college, graduate school...),
- Workplace (equipment for doctoral candidate),
- Bilateral commitment to the principles of good scientific practice,
- Rules in case of conflict,
- Special measures or regulations to reconcile family and academic work.

[4] [http://www.dfg.de/download/pdf/dfg\\_im\\_profil/reden\\_stellungnahmen/download/empfehlung\\_wiss\\_praxis\\_1310.pdf](http://www.dfg.de/download/pdf/dfg_im_profil/reden_stellungnahmen/download/empfehlung_wiss_praxis_1310.pdf)

[5] <https://www.graduiertenakademie.uni-hannover.de/promotionsordnungen.html?&L=1>

[6] <https://www.graduiertenakademie.uni->

[7] [https://www.graduiertenakademie.uni-hannover.de/fileadmin/graduiertenakademie/weitere\\_pdf-Dokumente/Guidelines\\_Brochure\\_A5\\_klein\\_EN.pdf](https://www.graduiertenakademie.uni-hannover.de/fileadmin/graduiertenakademie/weitere_pdf-Dokumente/Guidelines_Brochure_A5_klein_EN.pdf)

[8] [https://www.graduiertenakademie.uni-hannover.de/fileadmin/graduiertenakademie/weitere\\_pdf-Dokumente/Leitlinien\\_MWK\\_LHK.pdf](https://www.graduiertenakademie.uni-hannover.de/fileadmin/graduiertenakademie/weitere_pdf-Dokumente/Leitlinien_MWK_LHK.pdf)