

Symmetry Breaking

in Fundamental Interactions

Training and Policy Manual

This manual has been written for the benefit of doctoral students, supervisors, members and associated members of GRK **Symmetry Breaking in Fundamental Interactions** (DFG Research Training Group GRK1581). It should be used as a guide within the framework of the GRK.

It does not cover legal aspects of the program.

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Graduate School

Symmetry Breaking in Fundamental Interactions

DFG Research Training Group (GRK 1581/2)

Coordination Office

Johannes Gutenberg University Mainz

Institute of Physics

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Mission

The Research Training Group *Symmetry Breaking* strives to offer outstanding doctoral students excellent conditions for conducting their doctoral studies in the interdisciplinary fields of physics. To this end, two institutes affiliated with the department of physics at Johannes Gutenberg University Mainz have joined forces to offer a common structured doctoral program: The Institute of Physics and the Institute of Nuclear Physics.

Doctoral students of *Symmetry Breaking* (named “students” hereafter) will benefit from:

- A broad variety of scientific training (e.g. GRK¹ and PRISMA² seminars and lectures),
- Well-structured, individualized graduate education, as well as personal supervision,
- State-of-the-art research equipment in an attractive and internationally competitive research environment,
- A stimulating academic environment,
- An efficient organizational structure.

Thus students will be able to:

- ✓ Pursue independent, high-level research while working as members of an internationally recognized research team,
- ✓ Become a part of an international scientific network,
- ✓ Complete their doctoral studies within three years or less,
- ✓ Prepare for a successful further career in science or industry.

¹ GRK is an abbreviation for the German word „Graduiertenkolleg“ - *Engl.: Graduate School* or the less common *Research Training Group* (used frequently by the DFG – the German Research Foundation)

² PRISMA is an abbreviation for the title of the Cluster of Excellence „Precision Physics, Fundamental Interactions and Structure of Matter”

A. BASIC INFORMATION

A. 1 General Policy of GRK Symmetry Breaking

All persons involved in the program of the Research Training Group GRK *Symmetry Breaking* must commit themselves to the general policy rules of the Research Training Group:

They agree to

- Comply with standards of good scientific practice as published by the DFG (German Research Foundation),
- Work together in a co-operative way,
- Ensure transparency of all processes,
- Promote internationality,
- Promote networking with other scientists,
- Be aware of gender issues and promote concepts supporting gender equality,
- Encourage concepts for family-friendly education,
- State their affiliation to the GRK in the acknowledgements of all publications using:
“...is a recipient of a fellowship through GRK *Symmetry Breaking* (DFG/GRK 1581).”
(*for fellows*) or
“...is supported in part by GRK *Symmetry Breaking* (DFG/GRK 1581).” (*for associated members, thus “Kollegiaten”*).

A. 2 Scientific Vision

One of the key ideas in modern physics is the realization that symmetries are of fundamental importance for our understanding of the laws of nature and the structure of matter. The hallmark of the school is the application of a range of complementary theoretical and experimental methods for pursuing a common research goal. Research activities range from experiments at high-energy particle colliders to precision measurements using ion traps or ultra-cold neutrons, complemented by activities in theoretical physics.

Three main research areas form the scientific basis for the graduate school:

- The origin of mass and the structure of matter,
- The standard model and beyond, and
- Breaking of fundamental symmetries.

Precision measurements, which are among the often-documented strengths of the participating scientists, are the key for the understanding of the role of symmetries in nature. The participating scientists are internationally renowned experts and have access to unique local facilities, which play a special role for the training of graduate students. These include the electron accelerator MAMI-C, the research reactor TRIGA, as well as the high-performance clusters MESA; HIMSTER, MOGON, WILSON. The participating scientists contribute significantly to research activities at national and international laboratories, such as CERN, ILL, BES-III, FAIR and also the neutrino telescope IceCube in the antarctic ice.

A. 3 Information on the Graduate School

The Graduate School *Symmetry Breaking* in Fundamental Interactions is a DFG Research Training Group (GRK1581) and was established at the Johannes Gutenberg-University of Mainz in October 2009 and continues in a second phase from April 2014 to September 2018. It supports 12 fellows, one qualifying fellow within the fast-track study program and a varying number of associated members (“Kollegiaten”).

The Graduate School maintains its own website:

<http://www.symmetrybreaking.uni-mainz.de/>

All important dates, events, and other up-to date information will be published on this site. Doctoral students and PIs are encouraged to check the website regularly and also to contribute to its contents by delivering information about publications, awards, interesting conferences, soft-skills courses or other events by email (symmetry@uni-mainz.de).

The GRK has a lean organizational structure and a flat hierarchy in its managing institutions: director, steering committee, selection committee and coordination office.

B. ORGANISATION OF GRK Symmetry Breaking

B. 1 Memberships

B.1.1 Fellows

Outstandingly excellent Master of Science students (or equivalent) with a suitable study background in physics can be admitted to GRK *Symmetry Breaking*. Fellows are employed at the Johannes Gutenberg University Mainz and receive a salary through GRK. The salary is based on two-thirds of a postdoctoral salary and is subject to taxation. It includes health insurance and the regular social security package.

We have a total of 12 fellows throughout the year and one additional fast track student fellowship each year.

Due to the employment and there are several requirements that have to be met. Details in Chapter D.1.

B.1.2 Fast Track Qualification Fellowship

Outstandingly excellent Bachelor of Science graduates (or graduates of a German “Fachhochschule”) with a suitable study background can apply for a 12 months fellowship in order to prepare for a doctorate in our department without a M.Sc. degree.

During this year (starting in October each year), students will

- follow a study program which is individually designed by the supervisor on a master-level aiming to bring the student up to the standards of a regular PhD student within a two-semester period;
- write a scientific thesis for a 3 months period after a successful study program being among the best 10% of the graduates that year.

If the applicant completes this 12 months study program successfully and a successful thesis, the Selection Committee grants admission to the PhD program.

B.1.3 Associated Members (“Kollegiaten”)

Doctoral students of the Institute of Physics and Nuclear Physics of the University of Mainz with a suitable research topic who have sent an application (motivation letter, CV, Master’s certificate and transcript of grades) can be admitted as associated members. The application will be evaluated by the Selection Committee. Associated members are funded by their research groups or other third party funds. They can nevertheless apply for travel grants and they profit from the support and qualification concept of the Graduate School.

Once admitted a membership lasts 36 months or ends with the submission of the PhD thesis at the Dean’s office.

B.1.4 Student Representative

The doctoral students annually elect one student representative. The main duty of the student representative is to officially promote the view and interests of doctoral students

members in meetings and decisions concerning the GRK. In addition, he or she can play an active role by collecting ideas among the fellows for topics of seminars and for workshops which are to be held during the bi-annual retreats or summer schools. The student representative is an appointed member of the GRK Steering Committee and the GRK Selection Committee.

B. 2 Principal Investigators

Principal Investigators (PIs) are the base of GRK *Symmetry Breaking*. All PIs participate in the supervision of doctoral students. In addition, PIs have the responsibility to plan training activities and to support the development of GRK *Symmetry Breaking*.

The current GRK PIs are: Volker Büscher, Achim Denig, Lutz Köpke, Matthias Neubert, Concettina Sfienti, Stefan Tapprogge, Marc Vanderhaeghen, Stefan Weinzierl, Hartmut Wittig.

Associated Scientists: Miriam Fritsch, Werner Heil, Frank Maas.

B. 3 Steering Committee

The steering committee consists of 5 elected PIs, representatives of several administrative offices of the university and the student representative.

It is responsible for the overall program, the curriculum, the organization of workshops and for all general aspects of the school. The steering committee also decides on the allocation of individual research funds and prizes and oversees the progress of the school as a whole.

The current members of the steering committee are: Volker Büscher, Werner Heil, Matthias Neubert, Stefan Weinzierl (ex officio), Hartmut Wittig, the student representative, University Vice President for Research, a member of the Quality Assurance Center, a representative of the Department of International Affairs, and a representative of the Gender Equality Office.

B. 4 Selection Committee

About six times a year, the incoming applications are evaluated by the selection committee and excellent candidates are chosen as new fellows.

The selection and admission criteria are based on the academic qualification, motivation and suitability for the program. In some cases, candidates might be invited for an on-site interview/presentation before a decision is made on their admission.

The current elected members of the selection committee are: Concettina Sfienti, Stefan Tapprogge, Marc Vanderhaeghen, Stefan Weinzierl (ex officio) and the student representative.

B. 5 Scientific Director

The current director of GRK *Symmetry Breaking* is Prof. Dr. Stefan Weinzierl. He has been appointed by the steering committee. He is the official representative of GRK *Symmetry Breaking*. He is responsible for the day-to-day running of the Research Training Group, the budget and gender issues, and ensures that decisions taken by the faculty and the steering committee are implemented in a proper and timely manner. He is supported by the GRK Coordination Office.

B. 6 Coordination Office

The Coordination Office is responsible for implementing the decisions of the Graduate School's steering committee and selection committee. Further responsibilities include upholding contact to and between members, collecting applications, communicating with applicants and their referees, pre-selecting of applications before selection committee meetings, coordinating and organizing training and other events, managing the financial resources, and administering and representing the graduate school. In general, the GRK Coordination Office is the first institution which members should contact for all questions regarding the postgraduate program or related topics.

The GRK Coordination Office is headed by the coordinator, Ms. Ellen Angela Lugert.

C. SUPPORT and QUALIFICATION CONCEPT

C. 1 Project Plan

At the beginning of their doctoral work (after the first 2 months), doctoral students outline a project plan together with their supervisor.

The students establish a project plan for themselves. The supervisors and the Coordination Office will support the student and help him/her to include educational means into the individual training plan.

The project plan helps to improve the individual training according to the specific needs of the student. It should include long-term and short-term goals as well as educational and any other means, which will help the student to achieve his/her goals. A template for a project plan can be found in Annex 1.

The student discusses the project plan with his/her mentor, who can give advice from a general point of view.

The student is requested to send an electronic copy of the project plan and a printed copy which is signed by the student, the supervisor and by the mentor to the Coordination Office.

C. 2 Training Elements

The Graduate School aims at striking the balance between performing independent research and attending courses and seminars in order for its fellows to become independent and successful scientists. Both scientific competence and complementary soft skills are considered to be of great importance. Therefore, the school offers a training program for every fellow and associated member based on eight training elements:

- Training through research,
- Student's seminars,
- Annual retreats or summer schools,
- Soft skills courses
- Language training,
- Conference participation,
- Lectures / seminar series,
- Research visits.

C.2.1 Training through Research

All members will actively participate in research projects within their individual scientific groups and also pursue their own research projects. This work will be guided by the supervisor.

C.2.2 Student Seminars

Student seminars are organized by the students for the students. The goal is to enhance networking between students and to encourage scientific collaboration within the school. The student seminars also provide a good opportunity to improve presentation techniques.

C.2.3 Retreats and Summer Schools

Summer schools and retreats are organized by the PIs and the coordinator of GRK *Symmetry Breaking* on an annual basis. Fellows are obliged to participate in these events, associated members are cordially welcome to join. The participation in external summer schools is also supported, if the student and his/her supervisor consider this to be beneficial.

C.2.4 Complementary Skills Courses

In addition to the acquisition of scientific knowledge, the training concept is closely entwined with the university-wide programme *Doctoral Studies at Mainz*, which is aimed at teaching key qualifications and transferable skills (e.g. time and self-management, intercultural communication, job hunting skills etc.).

The above mentioned trainings are offered either

→ by the university's "General Postgraduate Program" Training center ([GPP](#)) and the program with dates can be found at <http://www.zq.uni-mainz.de/eng/1239.php> or

→ by the GRK *Symmetry Breaking*, which are regularly announced on our website.

If there are free slots our members are invited to join the complementary skills courses of the [MAINZ](#) Graduate School.

In addition, students can be supported to participate in soft skills courses offered by external institutions (after checking with the Coordination Office).

Fellows must attend at least one soft skills course per year to promote research and science related skills, and to develop central key qualifications. The GPP offers lectures and workshops which also facilitate the university-wide networking of doctoral students.

Therefore, fellows may attend a second soft skills training or more per year on a voluntary basis.

C.2.5 Foreign Language Training

Furthermore, the school strongly encourages all students to improve their language skills in English and/or German.

Language courses are available at the university's Foreign Language Center ("Fremdsprachenzentrum") at <http://www.fsz.uni-mainz.de>. It is situated on the university campus in Jakob-Welder Weg 18 (Philosophicum).

External language courses can be sponsored by the Graduate School upon request.

C.2.6 Conference Participation

The school supports students to actively participate in conferences inside and outside Germany. The conferences are selected by the student and his/her supervisor. Students can receive funding for travel costs and conference fees and are encouraged to contribute actively to the conference by presenting a talk or a poster (or other). Throughout the doctoral training, the school funds a minimum of one conference participation. Additional funding depends on the available budget.

Students are encouraged to attend at least one summer school or conference per year.

C.2.7 Lectures/Seminar Series

The Graduate School offers a variety of lectures and seminars to the students. Advanced lectures on general topics as well as seminar lectures on specialized topics improve the scientific knowledge and expertise of the students.

1. PRISMA colloquium and GRK seminar
(weekly seminar during the semester; please refer to iAnnounce to see details of the program)
The participation for all fellows is mandatory. Associated members are encouraged to participate.
2. Advanced Lectures for the Graduate School (please refer to JoguStine)
All members should attend at least two of these lectures during the doctorate.

Typically the lecture is held by a theoretical physicist together or in turns with an experimental physicist.

C.2.8 Research Visits

The school offers students the opportunity to spend a limited amount of time at a research institution abroad. Typically, such a visit is organized via the contacts of the supervisor and can be funded by GRK upon request.

In addition to the scientific benefits of such a stay, it helps the student to establish an international network. The school encourages students to combine a research visit abroad with conference participation.

C. 3 Supervision / Counseling

The student is encouraged to implement his/her personal goals in the training plan and to complete the required training elements. Supervisors are expected to actively support their students in their efforts.

C.3.1 Supervisor

Typically, the supervisor is the head of the research group which the student has joined and the first contact person for the student. It is the supervisor's responsibility to advise and support the student in his/her training and to help solve organizational problems that might occur. He/She needs to ensure that the student can attend the required training elements offered by the school. The supervisor takes an active role in scheduling the project plan and progress reports and ensures a proper documentation.

His/her duties and responsibilities can be shared with the mentor.

C.3.2 Mentor

The mentor is a person from academia (Professor or Junior Professor) who advises the student on his/her research project, supports the student in his/her training as well as on career related questions. Additionally, he or she should act as a mediator between the student and his supervisor in case of problems.

The mentor cannot be a member of the same research group and cannot be the 2nd supervisor of your PhD. He or she should be chosen by the new fellow within the first two weeks after beginning the PhD or by the Coordination Office.

Each student should have regular meetings with his/her supervisor and mentor to discuss the progress of or problems with the thesis project.

There is a GRK-guideline for mentees for download from our website.

C.3.3 Student Counselors

First-year doctoral students, especially if they are from another university, can receive counseling from a second-year or a third-year student upon request. This counseling is coordinated by the Coordination Office. The coordinator proposes one or two people and organizes a first meeting. Once the contact is set up, further contacts are managed independently by counselee and student counselor.

C. 4 Time Schedule of Doctorate

Students of GRK *Symmetry Breaking* are expected to finish their doctorate within three years. Exceptions from this rule can be made on well-founded request for a prolongation that has to be negotiated with the specific research group at least two months before the end of the scheduled doctorate period.

In order to help complete their thesis within a period of three years, all students are required to submit a project plan within the first 2 months, and progress reports before the end of the first and second year.

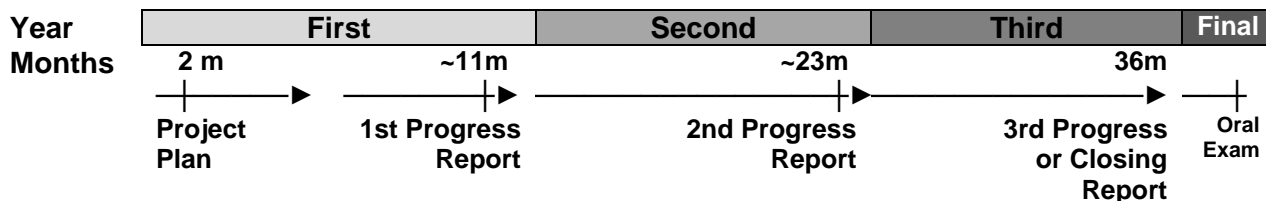


Figure above: Timeline of thesis period

C.4.1 Project Plan

Within the first 2 months of the doctorate, the candidate submits a written project plan for his/her doctorate project. The project plan should include a general introduction, a description of the research project, and research goals for the first year. It should include perspectives and an approximate outline for the project over 3 years (8 pages max.). A template can be found in Annex 1.

The project plan has to be signed by the student, the supervisor and the mentor and needs to be submitted electronically to the Coordination Office.

C.4.2 Progress Reports

Before the end of the first and second year of the doctorate the student prepares a written progress report, which should include the status of the research project, an overview of achieved goals (milestones), accomplished trainings, perspectives and outlook, and goals for the next year. A template can be found in Annex 2.

→ D. 6 Reporting Duties

A copy of each progress report has to be signed by the student, the supervisor and the mentor and has to be sent electronically to the Coordination Office.

C.4.2 Closing Reports

After the PhD thesis has been handed in at the Dean's office and before the colloquium (oral PhD examination) the student prepares a written closing report, which should include an overview of achieved goals, a summary of (positive/negative) results, accomplished trainings, accomplished conferences workshops, seminars and research visits and a statement on the support and qualification concept of the GRK.

A template can be found in Annex 3.

The closing report has to be signed by the student and has to be sent as a pdf-file to the Coordination Office by e-mail together with copies or scans of the doctoral degree certificate and an overview of the grades, and provide a link to the publication of the PhD thesis.

The membership then ends automatically.

The member may receive a certificate about the membership and all visited lectures, seminars and other GRK events upon request from the coordinator.

C. 5 Teaching

According to a decision by the department council, doctoral students are involved in the teaching of undergraduate and graduate students for at least three semesters, as stated in the [doctoral studies regulations of faculty 08](#). This will help students prepare for an academic career as well as training presentation techniques and achieve secureness in the subject.

C. 6 Language Courses

Language courses in English or German are strongly recommended for all fellows from abroad and can be sponsored by the Graduate School upon request.

The easiest way to register for a language course is the university's Foreign Language Center at <http://www.fsz.uni-mainz.de>. It is situated on the university campus in Jakob-Welder Weg 18 (Philosophicum).

C. 7 Principles of Good Scientific Practice

Rules of good scientific practice shall include principles for the following matters (in short)

- observing professional standards,
- documenting results,
- consistently questioning one's own findings,
- practicing strict honesty with regard to the contributions of partners, competitors, and predecessors,
- cooperation and leadership responsibility in working groups,
 - ◊ mentorship for young scientists and scholars,
 - ◊ securing and storing primary data,
 - ◊ scientific publications.

Fellows and associated members have to read the proposals of the DFG regarding the rules for good scientific practice on the DFG website:

http://www.dfg.de/download/pdf/dfg_im_profil/reden_stellungnahmen/download/self_regulation_98.pdf

http://www.dfg.de/download/pdf/dfg_im_profil/reden_stellungnahmen/download/empfehlung_wiss_praxis_0198.pdf

D. Requirements for members

D. 1 Duration of membership

A regular PhD fellowship covers 24 months and is continuing automatically as an associated membership until the PhD thesis is done.

A fast-track-fellowship is limited to no more than 12 months and is intended to be followed by a regular PhD fellowship.

The membership as an associated fellow ends after 36 months or when the PhD thesis is handed in at the dean's office, whichever event occurs first.

D. 2 Continuation of work contract

After the work contract (fellowship) with the Graduate School, a continuation for a third or more years is/are usually given by the individual research group the fellow works in.

D. 3 Full commitment

By accepting the fellowship you commit to fully engage yourself to the successful completion of the PhD thesis. All other activities need to be approved in advance by the Director of the Graduate School. The scope of a marginal employment as defined in the German Social Code does not have to be exceeded. Exemptions to this rule can only be granted, if this activity is directly supporting the purpose of the PhD project.

D. 3 Salary and ancillary incomes

The salary of a regular PHD fellowship is 67% of a postdoctoral salary, which is according to a salary in the public sector of the Land Rhineland-Palatinate and equals TV-L E13 (this is including health insurance and social security payments).

The stipend for a fast-track qualifying fellowship (during the twelve months of the study program) is 800,- Euros. The health insurance via the DAAD group tariff (145 Euros per month) will be deducted before the payment.

You are obliged to inform the GRK about all ancillary incomes and changes of your earning capacity during the contract period. If you have (approved) ancillary income from third parties which exceed the earnings level of a marginal employment, the overrun will be fully deducted from your fellowship.

D. 4 Obligation to notify of any changes

As a member of the GRK you have the obligation to inform the coordination office about all relevant changes:

- abandonment of the work on the PhD thesis;
- change of bank account;
- change of address;
- family status;
- submission of the PhD thesis at the dean's office.

D. 5 Reporting Duties

Fellows and associated members have to inform the Coordination Office about the selection of the **mentor**.

Also, it is a duty to send electronic copies by e-mail AND printed copies which carry the signatures of the **project plan**, **progress reports** as well as all published **papers** to the Coordination Office.

After the oral PhD exam all members send a copy (or link) of the **PhD thesis** and the **doctorate certificate** and the **closing report** to the coordinator of the school.

During their doctorate, doctoral students have the obligation to deliver **information** or reports for statistical purposes of the DFG on request to the Coordination Office.

For fellows: Please inform the coordinator, if you are not able to attend one of the mandatory events or lectures early enough in advance.

D. 6 Publications and Presentations

All publications and presentation or talks have to state the status as a member of the graduate school.

For all fellows, the text:

“...is a recipient of a fellowship through GRK *Symmetry Breaking* (DFG/GRK 1581)” has to be used.

For all other members:

“...is supported in part by GRK *Symmetry Breaking* (DFG/GRK 1581)” has to be used.

The Symmetry Breaking logo can be used on the cover sheet or else.

Please contact the Coordination Office to get the Symmetry Breaking-logo-file.

IMPORTANT: Send an electronic copy of all your publications to the coordinator.

D. 7 Regulations of the Department (Promotionsverpflichtungen)

All our members are subject to the [doctoral studies regulations of faculty 08](#). Therefore, each member has to be admitted as a doctoral student by the dean's office at the beginning of the PhD project and has to study the regulations thoroughly.

Please note:

If you have been admitted as a doctoral student according to the revised regulations (effective since Feb. 18, 2014) you have to be enrolled in accordance with the regulations of the University Act for the State of Rhineland Palatinate and the Enrollment Ordinance of Mainz University.

E. Organizational Matters

E.1 Business Trips

Business trips can be supported by the Graduate School for all members upon request. Depending on the status of your membership and the funds you have received already your written explanation/request why and where you would like to travel the GRK can be support on a varying scale.

E. 1.1 Travel Request Form (“Dienstreiseantrag”)

For each business trip during your employment at the university, a travel request form has to be filled in and processed. Please refer to the detailed explanations on the information sheet “How to organize a business trip” (Annex 4).

If you are NOT employed with the university you will have to fill in another form. (Annex 5).

E. 1.2 Reimbursement of Travel Expenses

There is an annual budget to support trips to summer schools and conferences (or else). Please contact the Coordination Office for more details.

To get the cost for a business trip reimbursed, you should contact the Coordination Office early enough before the trip starts. It is necessary to send a written request addressed to the director of the Graduate School Stefan Weinzierl and send it to the coordinator. The details are listed in Annex 4.

E. 2 PhD Thesis Award

The steering committee awards up to two prizes for the best PhD thesis of the previous year. All members (fellows and associated members) of the GRK can receive this award. The essential precondition is a *summa cum laude* honor.

E. 4 Gender Mainstreaming

E. 4.1 Individual Coaching

A female fellow might want to improve some of her soft skills by an individual coaching with an external expert. We can invite or organize a date and a visit to or by a soft skills expert on request.

E. 4.2 Ada Lovelace Mentoring Program

We encourage all our female members to actively participate in the Ada Lovelace Project (ALP) Mentoring Program. It usually starts in January and lasts for 12 months. It is meant as an additional mentoring during the second or third year of the doctorate and does not replace the mentor within the GRK's support program. During the ALP year you will get a number of soft skills trainings on the campus and have several meetings with your ALP mentor usually at or near her workplace.

Annex

Annex 1

Template for a Project Plan

Last name:

First name

Thesis

Starting date of doctorate:

Title:

Supervisors

Supervisor:

Mentor:

Student Counselor (optional):

Outline

1. General Introduction
2. Description of the Research Project
3. Research Goals for the First Year
4. Training to Achieve these Goals
(specific research skills/ soft skills/ communication skills)
5. Perspectives for the Second Year
6. Approximate Outline for the Whole Project (3 years)
7. Anticipated Conferences, Workshops, Seminars, and Research Visits

Date:

Signatures

Student: _____

Supervisor: _____

Mentor: _____

Annex 2

Template for a Progress Report

Last name:

First name

Thesis Title

Months after begin of doctorate:

Supervisor:

Report on Progress

1. Status of the Research Project
2. Overview of Achieved Goals (Milestones)
3. Accomplished Trainings
4. Planned Training
(specific research skills/ soft skills/ communication skills)
5. Perspectives for the Next Year
6. Attended Conferences, Workshops, Seminars, and Research Visits

Date:

Signatures

Student: _____

Supervisor: _____

Mentor: _____

Annex 3

Template for a Closing Report

Last name:

First name

Thesis Title _____

(months to accomplish PhD):

Supervisor: _____

Report on Progress & Results _____

1. Primary Project Plan and Modifications
2. Overview of Achieved Goals (Milestones)
3. Results (positive/negative)
4. Accomplished Trainings
(specific research skills/ soft skills/ communication skills)
5. Accomplished Conferences, Workshops, Seminars, and Research Visits
6. Statement on Support & Qualification Concept of the GRK
(pros and cons re. events, reports, financial support, general aspects)

Future Occupation _____

1. Name of future institution or company
2. Position/function

Date:

Signature: _____
(Doctoral Student)

How to Organize a Business Trip

Step 1: Ask your supervisor for permission and for possible financial support.
If a funding by the work group budget is not possible, you may request financial support by the Graduate School.

→ Write a short letter addressed to the director, Stefan Weinzierl, and ask for financial support from the school. The necessary topics are:

- Your own name and address
- Purpose and date of trip
- Explanation on how this trip supports your work on your PhD thesis
- Cost estimates for flight/train ticket, accommodation and conference fee, statement if full board is included or not.

You need to make that request well enough in advance of the trip!

Step 2: a) Always fill in an application form ahead of your trip:

- 2 weeks ahead of a business trip within Germany
- 4 weeks ahead of a business trip abroad

The form called „**Dienstreiseantrag für Fachbereichsangehörige**“ can be found in the download section of our website or at your research group secretariat.

b) When duly completed and signed, forward this form to the work group secretary or the coordinator's office who will forward it to the next necessary processing colleague.

c) After the administrative process has been completed the travel request form will be returned to you with the signatures of the head of the Physics Institute / the dean of our department / and an HR responsible.

Step 1 and step 2 are obligatory for insurance purposes!

It is an authorization. Keep it safely!

Step 3: During the trip collect and keep all your tickets, taxi receipts (with date, destination, precise amount), hotel invoice (headed by your name and the institute's address!), confirmation of conference participation or payment of fee.

Step 4: Request for Cost reimbursement after the trip

Fill in the form "**Antrag auf Erstattung von Reisekosten**" which can be found on our website or at your work group secretariats. Then hand it in with all originals of your receipts (glued on plain A4 paper, with your name). Please do not staple!
If your receipts do not include a payment information, you will add a copy of your payment receipt (credit card or bank account statement).