

Introduction

The PhD students represent an important and valuable resource within the Max-Planck-Society (MPG). Regardless of their particular fields of research, all PhD students strive to maximize their achievements during the PhD period, to avail of and contribute to the scientific profile of their respective MPIs and to effectively plan their career. Proficient communication-structures among students and between students and the MPG are essential for an exchange upon these common interests as well as for joining efforts in improving and ensuring the efficiency of the PhD period.

In order to focus the internal organisation and collaboration of the PhD students at all MPIs, Sadegh Khochfar (MPI for Astronomy, Heidelberg) and Andrea Raccanelli (MPI for Radio-astronomy, Bonn) have initiated a network which serves to emphasize and contribute to the aims that were stated in the MPG Rundschreiben 63/1999 and to the ideas that led to the establishment of the International Max Planck Research Schools.

The student representatives from all MPIs were invited to join the first meeting of the network, which was held in Heidelberg from April 4th to April 6th. More than fifty students from all three sections of the MPG participated in this meeting, representing 41 of the total 72 MPIs. The Max Planck Institute for Astronomy hosted the work sessions on April 5th and 6th and the network is very grateful to the Directors of the institute, Prof. Dr. Thomas Henning and Prof. Dr. Hans-Walter Rix, for their kind and generous support. During the two day meeting oral presentations and discussions led to the formation of workgroups focussing on different projects of common interest. The resulting workgroup reports are enclosed in the following pages. The network also elected student representatives from all three sections in order to provide a representation-structure that facilitates regular contacts between the network and the MPG.

We hope that our suggestions and projects will find the agreement and support of the MPG. We are eager to improve on these and would be grateful to receive feedback.

Workgroup-Reports

I. GAINING PERSPECTIVES FROM INTERDISCIPLINARY COLLABORATION

1. Purpose

To improve the quality of the MPG students' individual scientific work and to make their contribution to the essential role that the MPG occupies in international research more efficient, the PhD students propose to collaborate on topics that are of common interest to all PhD students of the MPG. Having evaluated needs and previous initiatives of PhD students at individual MPIs, our combined efforts shall help to build a stable network. This will not only minimize the cost and time of parallel initiatives which promote e.g. scientific writing, career planning or equal opportunities at individual MPIs, but our proposals shall also serve to expand and complement each others' hermeneutic knowledge.

2. Projects

2.1. Addressing issues of common interest

Every PhD student aims to improve the way of presenting the results of his/her research in talks or lectures, and of publishing them in articles and his/her thesis. The student also needs to learn about application procedures, job opportunities and legal issues. Therefore contacts are being established to individual MPIs, Universities, Job Centres and other institutions that are already involved in organizing events on topics such as rhetoric, interdisciplinary seminars, career planning and promoting the presence of women in research, which benefit from experiences and/or resources (e.g. concerning advanced training programs). We will join the efforts of the individual institutes to address these topics of general interest and in order to minimize efforts and expenses.

2.1.1. Presenting Science

Seminars on giving talks and on writing an abstract, article, proposal, are regularly organized in Bonn by Prof. Dr. Klaas S. de Boer (Sternwarte Bonn, member of the board of directors of "Astronomy and Astrophysics"), who will kindly make available his notes and hints on the subject. Also Dr. Alan Roy (MPI for Radioastronomy, Bonn, group Dr. Zensus) offered to share his experience on giving presentations. A seminar for the students of the institute was held on 23 January 2003 (of which a video will be made available) and the aim is to hold such talks once a year.

These and other local initiatives already active and open to all students will be advertised on our network portal. Furthermore, supplementary lists of professionals and companies offering related seminars will be collected and published as to encourage the carrying out of further workshops, for which the institutes within the same region may work together.

2.1.2. Teaching experience

"Schnuppertage" are organized every year by the University of Bonn to give high school students an overview of the possibilities for study. The MPI for Radio Astronomy is contributing two workshops this year, scheduled for 12 June 2003: "Einflüsse der modernen Kommunikationstechnik auf die Radioastronomie" (B. Klein, group Prof. Dr. Wielebinski) and "Thermische Empfänger, Kryotechnik und das frühe Universum" (A. Raccanelli, group Prof. Dr. Menten).

Thrice a forum aiming at philosophical insights into culture was conducted, involving students from the MPI for Neuropsychological Research, Leipzig and the MPI for the Physics of Complex Systems, Dresden, the Goethe Institute as well as universi-

ties, schools, artists and pupils from Czech Republic.

School lectures like those organized in Hamburg during the MPG general assembly constitute another example of activities to which PhD students could offer important contributions.

To cover the level of university teaching, PhD students could offer seminars or lectures, from which both, universities and PhD students, would benefit.

This and similar events would give PhD students the opportunity to gain teaching experience, and give MPIs the possibility to attract students and to make their research activity known to the wider public.

2.1.3. Career

Following the successful example of the Max Planck Institute for Experimental Medicine in Göttingen, companies will be encouraged to introduce themselves in talks and inform about job opportunities.

Seminars for women on application and negotiation strategies as well as on career planning offer exceptional opportunities to strengthen competences and potentials of female PhD and Postdoctoral students within the MPG. The Equality Representative (Gleichstellungsbeauftragte) of the MPG, Dr. Marlis Mirbach, has kindly informed us that the Bavarian Administrative School (Bayerische Verwaltungsschule) along with Dipl.-Päd. Monika Klinkhammer, have developed training-concepts specifically for women PhD and postdoctoral students of the MPG. Such seminars have already been conducted at individual MPIs (e.g. the MPI for Marine Microbiology, Bremen) and were financed by the individual MPI as well as by the participants who paid an additional fee. In order to make the information about these seminars more readily accessible and to encourage such seminars on a broader scale, we will offer information concerning these contact people and make available the contents of previous seminars on our webpage. A suggestion will also be offered to the official Women's Representative (Frauenbeauftragten) of individual MPIs, to organise seminars in cooperation with other MPIs

within the same region in order to keep travel expenses and other costs at a minimum.

2.2. Students exchange and share of skills and experiences

It is of major importance for any PhD student, with respect either to research or career, to broaden his/her knowledge, share ideas as well as to establish contacts within the same and related fields of research. Students at the MPI for Biochemistry in Martinsried have successfully established such a seminar, which included an informal discussion with the speaker that was found to be fruitful. Furthermore, the PhD network has resulted in an initiative to strengthen the ties between the MPI for Foreign and International Criminal Law, Freiburg, and the MPI for European Legal History, Frankfurt/Main.

To facilitate an exchange amongst PhD students and to support and encourage efforts in organizing events like seminars and conferences, either within one field of research or in interdisciplinary collaboration, the PhD network will avail of the PhD network portal. A database which collects talk offers and skills will allow searchers to find the appropriate person to invite for an event or collaboration. Helpful information and experiences (like inviting the speaker, organizing travel and accommodation etc.) will also be collected and made accessible.

This tool will also help to address for example, the need for translation and editing services as often the case for students of the MPI for Foreign and International Criminal Law, Freiburg since many write their dissertations in German which is not their mother tongue. The internet tool may provide a contact to a translation service for which there is proficient experience and negotiated affordability.

2.3. Building Bridges across the Disciplines

The student network strives to enable and encourage students of different disciplines to explore topics from the variety of scopes within the MPG. This interdisciplinary work shall serve aims that are exemplarily put into practice by the Hermann von Helmholtz-Zentrum für Kulturtechnik (HZK) at the Humboldt-University of Berlin. Professor Brüning, the present Director of the HZK, has emphasized the importance of PhD students – having both an expertise in their individual fields as well as awareness for the relevance of their own research to complementary disciplines – to collaborate on those less-researched topics that fall between or involve several disciplines.

Professor Brüning thus has kindly offered to host a one-day conference for 5-10 PhD students from all three sections of the MPG to work together on the topic "Languages of the Science-Community" (Sprachen der Wissensgesellschaft), and also to present and discuss interdisciplinary working methods as developed by the HZK. This conference is currently being scheduled. We would be very grateful if the anticipated conference would receive official support from the MPG so that the participating 5-10 PhD students may ask their directors to cover the travel expenses. The results of that meeting shall provide a first basis for establishing methods on how to successfully conduct further interdisciplinary collaboration.

It is anticipated for the next PhD network-meeting in Dresden to report on the

HZK-Conference and to set up examples by means of theme-sessions. Expected topics are "Science as History" (medieval and contemporary cosmological research compared); "Imagining Science" (comparing and analysing the strategies of designing conference-posters); "Logical Paradoxes in Art and Literature" (physical and mathematical puzzles as a source of inspiration); and "Knowledge as an Experience".

3. Prospects

Utilising the tools and resources, setting up and conducting events of various scopes will hopefully become easier through the information that is and will be gathered by the PhD network. Joining the efforts will make it easier to achieve the goals and create interdisciplinary bridges.

Several of the projects proposed by the PhD network can be pursued at either none or low cost (e.g. travel costs), as they rely on individual initiatives and the available MPG infrastructures. In this respect we are grateful to the public relations department of the MPG for their kind offer to support us with the information network of the MPG.

Funding possibilities could be searched either in the industry (e.g. the MPI for Biochemistry in Martinsried conducted seminars sponsored by collaborating companies) or in national and European programs. Nevertheless, to maintain independence, it might be desirable if the Max Planck Society could consider the possibility of supporting projects that are of common interest to all MPG students and the Society.

II. FINANCIAL SUPPORT FOR THE DOCTORAL WORK

The Max-Planck Gesellschaft mainly offers two types of contracts:

1.1. BAT IIa/2 contract

The BAT IIa/2 pays a net amount which depends on age and marital status of the student. MPG students receive between 1000 and 1080 Euro/month on average, plus a Christmas bonus of about 600 euro per year. The social security payments under this contract include:

- a. Retirement plan: The value is approximately 11,000 Euro for the three year period. The benefit entitlement can be moved to any country, even non-European, with which the German government has made a joint social security agreement.
- b. Health insurance: The value is approximately 9000 Euro for the three year period.
- c. Disability insurance: The value is approximately 3600 Euro for the three year period.
- d. Access to unemployment benefits: This amounts to 60% of the last monthly salary and is particularly important to ensure financial support during the time between the end of the PhD and the beginning of a new position.

Additionally, with the BAT IIa/2 contract, PhD students are formally employed by the MPG, and so the years spent at their Max-Planck-Institute count as work experience in the curriculum vitae.

1.2. Stipends

The stipend pays 920.33 Euro/month, with no Christmas bonus. This amount falls within the lower category of stipends. A higher category is in principle available to students that have at least two years of experience in research after their diploma, but this is rarely applied by MPIs, and some institutes are often not aware of this possibility. The comparison between the contract and the stipend (see below), is therefore based on the first category of stipend.

2. Comparison

Students that are paid with a stipend rather than a BAT lose between 1000 and 2500 Euro/year depending on age and marital status, and, most importantly, do not receive any of the available social security benefits. Recovering the retirement benefit entitlements during the years following the PhD is more expensive than the original value of 11,000 Euro because the payment is then calculated on the higher salary. All students who are given a stipend are excluded from the public health scheme, which is a financial disadvantage particularly for women. The cost of private insurance with coverage equivalent to that provided under the BAT contract further subtracts from the already low wage of the stipend.

3. Statistics

According to statistics to date collected from more than 30 MPIs, with a few rare exceptions, BAT IIa/2 contracts mainly apply to German students, whereas the overwhelming majority of foreign students are granted stipends. This inequality disadvantages foreign students compared to German students, and affects also German students because institutes might prefer to hire foreigners at a lower cost.

4. Conclusion

With the Rundschreiben 82/2002 the upper limits for the stipend have been increased to 975 Euro per month for the first category. This only partly covers the difference from the net payment of the BAT and does not compensate for the loss of social security benefits.

We would like to underline this inequality and the need of an urgent solution. A discussion should be initiated as soon as possible. The statistics and the documentation so far collected will be made available on request.

III. PHD ADVISORY COMMITTEES (PACs)

1. Why do we think a PAC is important?

In some MPIs PhD advisory committees (PACs) exist and are successful at advising PhD students, monitoring their thesis work and training them at presenting and defending their scientific work. PACs are also important for foreign students who might need extra help in a completely new environment (e.g. in finding contacts to a suitable university).

We are aware that some International Max Planck Research Schools (IMPRS) feature a system like the PAC. However, (1) not all MPIs have an IMPRS, (2) there is no unified PAC system in all IMPRS and (3) in addition it is not always accessible to all PhD students. We have therefore generated our comments based on those MPIs that feature a PAC or a PAC like system.

Though the details of a PAC might differ from institute to institute in terms of members of the committee and scheduled meetings (e.g. due to the different sizes and organisational structures of the institutes), we nevertheless would like to present important elements on existing PACs which have proved their usefulness and introduce them for guidance. We believe every PhD student should have an advisory committee as they have turned out to be beneficial to both the student and the supervisors.

2. Composition of the PAC

Most existing committees consist of three members. Usually members hold different positions at the institutes (directors are often members of the board, but also Postdoctorates who are familiar with the thesis work). PhD spokespersons of different institutes have stressed that external members of the committees (e.g. from universities) can be very valuable by adding a different and/or outside perspective to the student's work. At

least one member of the committee should be chosen by the PhD student. The committee should also be constituted in accordance with the supervisor(s), who is (are) either regular member(s) of the committee or invited to the meetings.

3. Meetings of the PAC

There should be regular meetings of the PAC, at least three times during the three years of the student's thesis work. At the first meeting the student should present his or her proposal for the thesis. On that occasion, the content of the work and its time schedule are discussed with the committee. At some institutes students write a proposal, at others a talk of about 30 minutes is given followed by a discussion.

At the subsequent meetings the progress of the work and changes in the concepts are discussed. The third meeting (at least 6 months before the thesis is due) is very important to make sure that the PhD student is able to complete writing the thesis within the set time frame. Possible problems and solutions have to be discussed. Minutes of all meetings should be taken and handed out to the committee and to the student and the advisor(s). These minutes of the PAC meetings are helpful both to the PhD students and the advisor(s) to judge the progress of the work (and future reference letters). At many institutes the PhD student holds additional seminars during the thesis work which the PAC attends.

We have outlined key elements of PACs which have been successfully established at different institutes. Creating PACs can improve communication between PhD students and supervisors thus enhancing the quality of his or her thesis as well as contributing to the students' development. If required we readily provide further information and details as well as comments about PACs at different institutes.

IV. SETTING UP AN MPG PHD NETWORK PORTAL ON THE WWW

1. Purpose

In order to enhance and coordinate the continued cooperation of the members of the MPG PhD Network and interested MPG PhD students in general, the MPG PhD Network is setting up a web page that is going to serve as its "portal".

2. Details

The central component of the Network portal will be a general-purpose discussion forum which will provide the opportunity to distribute information and continue discussions efficiently. The necessary forum software is available free of charge. While most of the forum will be public to give everyone the possibility to contribute, part of it will be non-public to facilitate the discussion of more sensitive topics.

To prevent potential misuse of the discussion forum, a number of moderators who regularly follow the discussions will be appointed. Additionally, each contribution to the discussions will be unambiguously associated to a personalized account to make the author identifiable.

Apart from this "interactive" discussion forum, there will be a classical web page layout to represent the MPG PhD Network.

It will state the Network's goals and projects and present the collected information and achieved results to the public. A list of contact persons, e.g. from the different subgroups working on different projects, will also be available.

For the collection of offers and available resources such as the ones compiled in the "Interdisciplinary" group there will be a searchable database which will significantly facilitate the coordination of joined efforts.

To allow the direct and efficient distribution of information among the members of the MPG PhD Network a mailing list will be set up. If possible, the webpage and the mailing list should be hosted under the "MPG.de" domain.

3. Future prospects

Once the MPG PhD Network portal is up and running, it will continue to evolve and grow with the work of the Network. The general-purpose discussion forum is suited to cover a diverse spectrum of applications with minimum effort. If deemed necessary or useful, additional custom-made solutions for specific purposes can be integrated.

V. NEXT MEETING

1. Place and Time of the next meeting

The next meeting is planned to take place at the MPI for the Physics of Complex Systems in Dresden in the fall of 2003. We all agreed that the next meeting should take place about six months after the first meeting to ensure the continuation of the PhD network. A preliminary date for the meeting is November 6 to 9, 2003 (Thursday to Sunday). As we plan to invite the MPG president Prof. Gruss (see below), the time of the meeting needs to be coordinated with his schedule.

2. Format of the next meeting

It is planned to invite the Ph.D. representative from each MPI and the MPG president Prof. Peter Gruss. In addition, the meeting will be open to all other MPI PhD students who are interested in participating. The meeting will consist of two parts.

The purpose of the first part is to ensure the maintenance of the network. Different organizational sessions will take place, including meetings of the different workgroups. This part will be open to the PhD representatives and could take place on Friday and Saturday.

The second part will include topic seminars and interdisciplinary workshops. This

part will be open to all participants of the meeting and could take place on Saturday and Sunday. All MPG PhD students will be invited to submit offers for seminars or workshops that could be of interest to a wider range of disciplines. Possible topics are rhetoric, presentation techniques, getting funding, or experiences from interdisciplinary research groups. In addition, there will be different workshops organized by the Interdisciplinary Workgroup (see above).

3. Planned Actions

Two invitation letters will be formulated. First, Prof. Peter Gruss will be invited to give a talk at the meeting and take part in an open discussion. In addition Mr. R. Willems will be invited to join the meeting. A second invitation letter will be send to all PhD students of the MPG. It will include an invitation to submit offers for seminars or workgroups that might be of interest to different disciplines. It is planned to send out this invitation letter by Mid May 2003.

A poster for the meeting will be designed until August 2003 and distributed to all MPIs.

Contact

The workgroups would gratefully welcome a discussion on the above mentioned topics and will be pleased to give more information on their projects. For this and any other questions concerning the PhD-network please contact Sadegh Khochfar who will then redistribute specific questions to the representatives of the workgroups.

Sadegh Khochfar
MPI for Astronomy
Address: Königstuhl 17, 69117 Heidelberg
E-mail: Khochfar@mpia-hd.mpg.de
Tel.: 0049-(0)6221-528-294

Representatives

The executive committee of the PhD Network consists of representatives of all three sections of the MPG. The representatives have been elected to serve as a bridge between the PhD students and the MPG in respect to communicating new information, proposals, data and questions. Beyond representing the PhD students of their own section, they are closely linked to one-another and to the representatives of the workgroups.

We would be grateful if the PhD representatives were allowed to participate in MPG Sections Symposia or Nachwuchsgruppen-Meetings. Such participation would constitute an excellent opportunity to exchange upon and discuss topics of common interest: It would not only allow the PhD students' representatives to explain needs and proposals of the PhD students but also to receive direct feedback and learn about the suggestions of the PhD students advisors' and Directors'.

1. Biology and Medicine

Indronil Chaudhuri
MPI for Developmental Biology
Address: Spemannstr. 35, 72076 Tübingen
E-mail: indronil.chaudhuri@tuebingen.mpg.de
Tel.: 0049-(0)7071-601-338

Tom Fritz
MPI for Cognitive Neuroscience
Address: Stephanstraße 1a, 04103 Leipzig
E-mail: fritz@cns.mpg.de
Tel.: 0049-(0)341-9940-239

Stefan Kalla
MPI for Experimental Medicine
Address: Hermann-Rein-Str. 3, 37075 Göttingen
E-mail: kalla@em.mpg.de
Tel.: 0049-(0)551-3899-714

Eva Lessmann
MPI for Immunobiology
Address: Postfach 1169, 79011 Freiburg
E-mail: lessmann@immunbio.mpg.de
Tel.: 0049-(0)5108-439

2. Chemistry, Physics and Technology

Sadegh Khochfar
MPI for Astronomy
Address: Königstuhl 17, 69117 Heidelberg
E-mail: Khochfar@mpia-hd.mpg.de
Tel.: 0049-(0)6221-528-294

Alberto Martinez Joaristi
MPI for Coal Research
Address: Kaiser-Wilhelm-Platz 1, 45470 Mülheim an der Ruhr
E-mail: amjoaristi@mpi-muehlheim.mpg.de
Tel.: 0049-(0)208-306-2369

Andrea Raccanelli
MPI for Radioastronomy
Address: Auf dem Hügel 69, 53121 Bonn
E-Mail: araccan@mpifr-bonn.MPG.de
Tel.: 0049-(0)228-525 256

3. Humanities

Dennis Alexis Valin Dittrich
MPI for Research into Economic Systems
Address: Kahlaische Straße 10, 07745 Jena
E-Mail: dittrich@mpiew-jena.mpg.de
Tel.: 0049-(0)3641-686-640

Kathrin Kirsch
MPI for Psycholinguistics
Address: Postbus 310, 6500 AH Nijmegen, The Netherlands
E-Mail: Kathrin.Kirsch@mpi.nl

Hanna Vorholt
MPI for History
Address: IMPRS, MPI für Geschichte, Hermann-Föge-Weg 11, D - 37073 Göttingen
E-Mail: hvorhol@imprs-hist.MPG.de
Tel. (priv.): 0049-(0)551-3707696

Participants

Antje Bauke, MPI of Molecular Plant Physiology, Golm
Marta Borasio, Fritz Haber Institute of the MPG, Berlin
Meike Burow, MPI of Chemical Ecology, Jena
Indronil Chauduri, MPI for Developmental Biology, Tübingen
Tanjew Dittgen, MPI for Medical Research, Heidelberg
Jelena Djokic, MPI for Mathematics in the Sciences, Leipzig
Natalie Ebner, MPI for Human Development, Berlin
Melanie Föcking, MPI for Neurological Research, Köln
Tom Fritz, MPI for Neuropsychological Research, Leipzig
Andreas Gaab, MPI for Chemistry (Otto Hahn Institute), Mainz
Lars Geffers, MPI of Experimental Endocrinology, Hannover
Tim Hüge, MPI for Radioastronomy, Bonn
Cécile Jamois, MPI of Microstructure Physics, Halle/Saale
Alberto Martinez Joaristi, MPI für Kohlenforschung (Coal Research), Mülheim/Ruhr
Stefan Kalla, MPI for Experimental Medicine, Göttingen
Mathias Th. Keil, MPI of Physics (Werner Heisenberg Institute), München
Sadeqh Khochfar, MPI for Astronomy, Heidelberg
Kathrin Kirsch, MPI for Psycholinguistics, Nijmegen
Stefan Knobl, Fritz Haber Institute of the MPG, Berlin
Eva Lessmann, MPI of Immunobiology, Freiburg
Torben Lessmann, MPI of Molecular Physiology, Dortmund
Tina Lösekann, MPI for Marine Microbiology, Bremen
Dieter Lukas, MPI for Evolutionary Anthropology, Leipzig
Florian Mintert, MPI for the Physics of Complex Systems, Dresden
Laura Muniz, MPI for Evolutionary Anthropology, Leipzig
Maren Nickel, MPI for Marine Microbiology, Bremen
Oliver Peglow, MPI for European Legal History, Frankfurt/Main
Andrea Raccanelli, MPI for Radioastronomy, Bonn
Julius Reiss, MPI of Metals Research, Stuttgart
Claudia Roth-Alpermann, MPI of Neurobiology, Martinsried
Angelika Rödel, MPI of Psychiatry, München
Sascha Rueger, MPI for Astronomy, Heidelberg
Meik Sacher, MPI of Biochemistry, Martinsried
Lucie Salwiczek, MPI for Behavioral Physiology, Seewiesen & MPRC for Ornithology
Armin Schäfer, MPI for the Study of Societies, Köln
Susanne Scheibe, MPI for Human Development, Berlin
Bernd Schmidt, MPI for Mathematics in the Sciences, Leipzig
Yakov Sergeev, MPI for Developmental Biology, Tübingen
Kerstin Skupch, MPI for Limnology, Plön
Kerstin Stockmeier, MPI for Biological Cybernetics, Tübingen
Scharie Tavcer, Max Planck Institute for Foreign and International Criminal Law, Freiburg
Stephan Tontrup, Max Planck Project Group Common Goods, Law, Politics and Economics, Bonn
Jens Twilmeyer, MPI of Biochemistry, Martinsried
Stefan Umbreit, MPI for Astronomy, Heidelberg
Dennis Alexis Valin Dittrich, MPI for Research into Economic Systems, Jena
Hanna Vorholt, MPI for History, Göttingen
Hauke Voß, MPI for Radioastronomy, Bonn

Hans-Jörg Warnatz, MPI for Molecular Genetics, Berlin
Franziska Weickert, MPI for the Chemical Physics of Solids, Dresden
Karoline Winkler, MPI for Chemistry (Otto Hahn Institute), Mainz