Bonn International Graduate Schools

Earn your doctorate in an outstanding research environment!
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Bundesstadt Bonn

Bonn is one of Germany’s growth regions and, despite the fact that the parliament and much of the government moved to new capital city Berlin in 1999, Bonn is more international than ever. The city has a lot more to offer than just beautiful surroundings and scenic landscapes. Bonn has a vibrant theater and cinema scene, not to mention a whole host of top-class museums and concert halls. The “Bundesstadt”, or Federal City, of Bonn is also a prospering business center and the heart of a pulsating science region with a number of high-profile research institutions.

Political and Economic Center

Although the parliament and most diplomats have long since made their way to Berlin, Bonn is still a political and administrative center. All ministries maintain offices in Bonn; indeed, six of them still have their official residence here. In recent years, the various United Nations departments that have established their seat in Bonn have added international flair. Additionally, many NGOs are located in Bonn, from Amnesty International to the World Wind Energy Association. Global players like Deutsche Telekom and Deutsche Post DHL together with its subsidiary Postbank offer thousands of highly qualified jobs, as do the property giant IVG, the gummy bear producer Haribo and the German broadcaster Deutsche Welle, to name just a few.
Culture and Leisure Opportunities

Ludwig van Beethoven (1770–1827) is one of the greatest composers of all time and Bonn’s most well-known son. The Beethoven-Haus, the composer’s birthplace, contains treasures like original scores and some of the maestro’s musical instruments. Bonn’s Opera House has an excellent reputation, as does the theater in Bad Godesberg. Bonn has a number of museums and exhibitions to offer, including the Haus der Geschichte (House of History), with thousands of visitors marveling at the exhibits from the post-1945 period on display covering 4,000 square meters. Further exhibitions located on Bonn’s “Museum Mile” include the Alexander Koenig Research Museum, Kunstmuseum Bonn, the Art and Exhibition Hall, Bonn’s Deutsches Museum, and FrauenMuseum (women’s museum – once the very first of its kind in the world).

Bonn and leisure – this means a quiet glass of beer in a beer garden, a cup of cappuccino at the Kaiserplatz, or Riebekuche (Reibekuchen – reminiscent of thin, crispy hash browns) at the Christmas market. There is no shortage of eateries in Bonn – from fast food to haute cuisine, from one end of the culinary world to the other, be it in the multicultural Altstadt, in Poppelsdorf, or in the cultural hotspot Endenich.

The Rheinländer

People from all over the world as well as native Rheinländer are the essentially happy-go-lucky inhabitants of this beautiful city, who tend to be more tolerant than opinionated, more hedonistic than spartan, art lovers rather than philistines. These characteristics of Rhineland people and life are particularly manifest during Carnival.
University of Bonn

Rooted in the Rhineland – at home in the world. An excellent reputation, about 34,000 students, and nearly 200 years of history: Rheinische Friedrich-Wilhelms-Universität Bonn is one of the leading universities in Germany and a particularly attractive destination for foreign researchers and students. It is a modern research-oriented university that operates internationally while remaining conscious of its long tradition.

History

The University of Bonn was founded in 1818 by King Friedrich Wilhelm III of Prussia. For over 100 years the Faculties of Catholic Theology, Protestant Theology, Medicine, Law, and Arts were all situated in the University’s main building, the former residence of the prince-electors. After prospering in the Wilhelmine era, the University suffered several setbacks. Both the independent academic tradition as well as the University buildings were greatly affected during the Nazi regime. After 1945 the University was rebuilt and soon regained its status as a renowned research institution. Bonn University Museum showcases almost 200 years of history – from the Foundation Charter dated 1818 to a 100-year-old rector’s robe.

Research University

Today, the University of Bonn is a research university committed to the idea of the universitas litterarum. Over 150 B.A., M.A., and PhD programs are offered by the University’s seven faculties:

- The Faculty of Catholic Theology
- The Faculty of Protestant Theology
- The Faculty of Law and Economics
- The Faculty of Medicine
- The Faculty of Arts
- The Faculty of Mathematics and Natural Sciences
- The Faculty of Agriculture
The University's belief in the principle of a comprehensive university in no way contradicts its efforts to sharpen its profile by setting subject priorities. Outstanding research focus areas at the University of Bonn are:

- Mathematics
- Economics
- Physics/Astronomy
- Life Sciences
- Chemistry
- Pharma Research
- Philosophy/Ethics
- Geosciences

**Excellent Research Environment**

The University of Bonn makes full use of the opportunities offered by its location in the ABC region (Aachen-Bonn-Cologne). The three ABC universities cooperate in many areas. This multilayered research landscape is also home to four universities of applied science, a whole host of research institutes belonging to the Fraunhofer-Gesellschaft, the Deutsches Zentrum für Luft- und Raumfahrt (German Aerospace Center), the Max Planck Society, the Center of Advanced European Studies and Research (caesar), the Life & Brain Research Center, and the Helmholtz Center of Neurodegenerative Diseases. And in addition to all this, the Deutsche Forschungsgemeinschaft (German Research Foundation), the Alexander von Humboldt Foundation, and the Deutscher Akademischer Austausch Dienst (German Academic Exchange Service) are all located in Bonn.

**The University of Bonn, a Global Player**

The University of Bonn has cross-faculty cooperation agreements with 60 universities around the globe, and there are ERASMUS agreements with a further 300 European universities. This, in turn, is reflected in the course offerings: There are some 30 international courses, most of which are taught completely in English or another foreign language – and there is still an upward trend. In addition, many visiting academics and leading researchers from abroad come to Bonn to teach and conduct research every year.
Bonn Graduate Center

The Bonn Graduate Center (BGC) is the central point of contact for any general or organizational concerns regarding doctoral studies. If you are currently pursuing or planning to pursue a doctoral degree please feel free to contact us. Join the many people who benefit from the Graduate Center’s extensive services!

Individual Consulting for Doctoral Candidates and Postdocs

Are you interested in earning a doctoral degree in Bonn? Are you already a doctoral researcher at the University of Bonn? Or do you work for the University as a postdoc? The Graduate Center will be happy to consult with you on any question you may have about doctoral studies in Bonn and about planning your academic career afterward.
Concerns you could discuss include these:
- Should I pursue a doctorate?
- How can I finance my doctorate?
- What benefits does a doctorate have as part of a structured program or a graduate school?
- What comes after the doctorate?
- How can I finance a postdoc project?
- How do I avoid academic misconduct?

The online portal www.phd.uni-bonn.de provides ample information about first steps on the path to a doctorate at the University of Bonn, on research funding, and on good scientific practice.

“Doctorate Plus”: Training and Orientation

The Graduate Center, together with its cooperation partners – HR Development, the Career Center, and the Bonn Center for University Didactics – offers training and further education measures for doctoral researchers at the University of Bonn. Our semester program, offered partly in English and partly in German, consists of workshops and seminars in four modules:

1. Organizing Research: courses on the organization of scientific work as well as on academic methods. Seminars range from project management for the doctorate to training for the dissertation defense.

2. Developing Competencies: The second module aims at strengthening your extracurricular skills through courses on academic presentation, creativity, or conflict management.

3. Learn How to Teach: training in didactic competencies for your career as a Higher Education teacher.

4. Building Your Career: This module encompasses workshops regarding your orientation on the job market and your career entry.

Funding Opportunities

The Bonn Graduate Center (BGC) posts its own funding opportunities for which doctoral candidates and postdocs can apply. Moreover, the website maintains an overview of all recent job and scholarship announcements at the University of Bonn.

Quality Assurance

By networking with graduate schools at other universities as well as with Bonn’s institutions for ensuring good academic practice, the Graduate Center provides ongoing quality assurance for doctorates at the University of Bonn.
Bonn International Graduate Schools (BIGS) offer excellent doctoral programs conforming to the highest international standards. They provide graduate students with outstanding research conditions, access to international research partnerships and educational programs tailored to their needs. BIGS provide the best possible preparation to embark on a high-level career in research and beyond.
BIGS in Detail

Excellency in Research
The University of Bonn has established BIGS in its designated areas of excellence in research. BIGS maintain close links with large-scale research projects (e.g. Collaborative Research Centers funded by the German Research Foundation) and in some cases with non-university research institutes, such as Max Planck Institutes, Helmholtz Centers, and Fraunhofer Institutes.

Integrating Master’s and Doctoral Program
Several BIGS offer fast-track programs that take students right from the BA to the PhD level. Unlike most German PhD programs, these BIGS offer four- to five-year integrated master’s and PhD programs.

International Orientation
BIGS provide English-language programs for graduate students from all over the world. BIGS have established numerous collaborations with renowned research partners across the globe and offer international exchange opportunities, thus preparing graduate students for a successful international career.

Transparent Application Process
BIGS take pride in their high admission standards: All positions for graduate students are internationally advertised and filled through a competitive selection process. Places are awarded based on academic excellence.

Support and Supervision
BIGS offer comprehensive support structures which go beyond the traditional mentor–student relationship between doctoral students and their advisors. In regular progress meetings, annual retreats, or PhD poster sessions, BIGS provide frequent feedback to their students and guarantee highest supervision standards.

Integration of Coursework and Research
BIGS combine coursework and active research beginning at an early stage of the program. All graduate students are exposed to research techniques and approaches that will shape their fields in the years to come. They are trained by renowned faculty members and contribute independently to a vibrant research environment.

Free of Tuition
The University of Bonn and the BIGS do not charge tuition. Students are asked to officially enroll with the University of Bonn as doctoral researchers and pay the common contribution of approx. € 250 per semester for general social services. A ticket for public transportation is included in this fee.
Bonn-Cologne Graduate School of Physics and Astronomy

The Bonn-Cologne Graduate School of Physics and Astronomy (BCGS) was founded jointly by the physics and astronomy departments of the universities in Bonn and Cologne. Today, in Bonn alone, more than 250 MSc and PhD students and more than 40 professors and lecturers are members of the BCGS, working on a wide array of research topics in physics and astrophysics.

What is the BCGS?

The BCGS combines all MSc and PhD studies in physics and astrophysics at the Universities of Bonn and Cologne. It was founded in 2006, and since 2007 receives federal funding in the framework of the German “excellence initiative”. About 25% of student members are in the “honors class”; they enjoy financial benefits, but also have additional obligations. Members of the honors class are selected by special committees upon application.
Some Distinguishing Features of the BCGS

Scholarships: Each year, the BCGS offers about 15 full scholarships (€700/month) to incoming first-year MSc students; during the second year the monthly scholarship is reduced to €300, but can readily be augmented to €700 by working as a teaching assistant. PhD students in the honors class receive €300 per month starting from the second year of their PhD studies.

Student allowances: Each student member of the BCGS can apply for funds to attend schools or workshops, or for other purposes related to their research work. Members of the honors branch are guaranteed at least €500 per year from this source.

Financial support during PhD: Usually PhD students are paid from funds of the research group they joined. Some PhD students also come with their own full scholarships from other sources.

Admission academy: Early each spring, the BCGS invites about 30 applicants from around the world to a week-long admission academy held in Bonn and Cologne; currently the admission academy is reserved for applicants to one of the Master courses.

Mentors: Each student member chooses two mentors among the teaching staff, one from each participating university.

Internationality: By now about 30% of incoming MSc students are from outside of Germany.
Graduate Studies in the BCGS

Obtaining an MSc degree in physics or astrophysics generally takes about two years. The first year is taken up by coursework. Only a few first-semester courses are mandatory; all other courses can be chosen from a wide selection. The entire second year of the MSc is devoted to the research phase, during which students work on their thesis, having joined one of the research groups.

During the PhD phase, no mandatory classes have to be taken, i.e. the students focus on their research.

During the research phase of the MSc studies, and during the PhD studies, students still can, and indeed are encouraged to, take additional classes. Of special note are the intensive weeks, week-long courses in which relatively small groups of students focus on learning a special topic hands-on.

Jie Gu, PhD candidate in theoretical physics

“The BCGS program strives to not only bring closer the Universities of Bonn and Cologne, but also to stimulate interactions between students from different research backgrounds. For instance, the annual poster session of research results of BCGS students gave me a unique chance to learn about the current trends in other fields I was interested in. Furthermore, the BCGS travel money allowed me more freedom to attend interesting schools and workshops.”
Research in the BCGS

During the research phase students join one of about 60 research groups. Research in Bonn focuses on the following:

- **Physics**: Experimental and theoretical high energy physics, experimental and theoretical hadron physics, photonics, theoretical condensed matter physics, and mathematical physics. Our department hosts two particle accelerators, several labs dedicated to the construction of sophisticated particle detectors, and modern labs exploring quantum optics. Some theorists use supercomputers, while our mathematical physicists enjoy close collaborations with members of the renowned mathematics department of our university.

- **Astrophysics**: Gravitational lensing, clusters of galaxies, the formation of cosmic structure, the interstellar medium, stellar dynamics, the evolution of stars, and neutron stars. Together with the Max Planck Institute for Radio Astronomy, our department operates a large radio telescope.

Research foci in Cologne are rather complementary, with emphasis on theoretical and experimental condensed matter physics, biophysics, nuclear physics, statistical physics, molecular astrophysics, the birth of stars, and the centers of galaxies.
The BGSE offers a structured doctoral program that combines challenging coursework with early individual research in a supportive and intellectually demanding environment. Outstanding students with a university degree (bachelor or master) in economics or related fields are encouraged to apply for admission. As a BGSE student, you will benefit from an excellent faculty and numerous collaborative research activities.
Academic Profile and Research Environment

The BGSE pursues research activities in the following five areas:

- Microeconomic theory
- Management and applied microeconomics
- Macroeconomics and public economics
- Financial economics
- Econometrics and statistics

The academic profile of the BGSE rests on the many joint research activities of the Economics Department currently including the research training group Heterogeneity, Risk, and Dynamics in Economic Systems, the Hausdorff Center for Mathematics, the Center for Economics and Neurosciences, and the Center for Advanced Studies in Law and Economics.

As a BGSE student, you will benefit from an impressive network of national and international partners, such as the Max Planck Institute for Research on Collective Goods, the Institute for the Study of Labor, and partner universities within the European Doctoral Program.

For many years, the Department of Economics at the University of Bonn has achieved top positions in all serious rankings of economics departments in Germany and Europe and is proud of its award-winning faculty members.

Courses, Workshops, and Supervision

The program consists of a course phase and a dissertation phase that begins in the third semester. You will start with PhD-level basic courses in mathematics, microeconomics, macroeconomics, and econometrics. You will then choose among a variety of courses, especially topics courses covering subjects from the current research frontier and preparing you to do independent research.

When you enter the BGSE, you are immediately assigned a mentor from among the postdoctoral researchers or advanced doctoral students of the BGSE. After having finished the research-oriented course phase, you will present your first research idea to a group of faculty members. At this occasion, you will find your first supervisor. Two more supervisors will join your committee before you finish your dissertation. During the dissertation phase, you participate in weekly workshops where you interact with other doctoral students, postdocs and faculty. You present your further research projects in these workshops as well as at conferences abroad and write the papers that will become part of your thesis.

PROFILE

- Field of study: Economics
- Degree awarded: Dr. rer. pol. (equivalent to PhD in Economics)
- Duration: Four years
- Requirements: Open to excellent students holding a bachelor’s or master’s degree in economics or related fields (including mathematics).
- Application: Online application platform. The application deadline is March 31; the program starts once a year in October.
- Scholarships: Available
- Fee: The BGSE does not raise tuition (for further information see page 11).
Funding, Grants, and Teaching Assistantships

The BGSE is happy to offer grants to most of its students. Monthly grants range between €800 and €1,300 depending on previous degrees and study progress. Additional travel funds are available during the dissertation phase for visiting conferences and for presenting your work to a broader audience. Furthermore, the BGSE finances international research visits of up to six months.

You can gain valuable experience and additional income with teaching assistantships.

The BGSE encourages you to apply for teaching assistantships at the department but asks you to wait with tutoring until you have finished the draft of your first paper. The reason for this is that you should fully focus on your research first. The average income of a teaching assistantship is around €400 per month (on top of your grant).

Internationality

An emphasis on internationality has a long tradition at the Economics Department in Bonn. As a BGSE student, you are encouraged to submit papers to international conferences such as the annual meetings of the European Economic Association, the Econometric Society, and to other internationally leading conferences.
Alongside numerous lectures and seminars held by international guest researchers, the BGSE offers summer schools on a regular basis, also held by internationally distinguished experts and visited by international students and postdocs. Of course, all summer schools as well as all other activities of the BGSE are conducted in English.

The BGSE is one of the founding partners of the European Doctoral Program (EDP). The EDP opens up the way for you to spend time at one of the EDP partners in Barcelona, Florence, London, Louvain-la-Neuve, Paris, and Tel Aviv, to participate at the annual doctoral student conference, the EDP Jamboree, and to benefit from the EDP’s long-established and firm tradition of integrating graduate students into the international academic community.

Based on the excellent reputation of graduate education in Bonn, BGSE students are equally well received by other institutions without formal cooperation agreements. In the last few years, some of our students have spent extensive research visits at a number of distinguished universities overseas, such as University of California at Berkeley, University of California at San Diego, Columbia University, Harvard University, New York University, University of Pennsylvania, Princeton University, Stanford University, and Yale University.

The BGSE not only exposes its students to the international community but also wants to attract international students to come study in Bonn.
Bonn International Graduate School of Drug Sciences

BIGS DrugS offers an interdisciplinary and structured graduation program for PhD students in the field of drug research related to medical and pharmaceutical sciences. Its education program consists of workshops, colloquia, advanced lectures, and symposia. In parallel, the PhD students follow their individual research projects for the PhD thesis. Mentoring in BIGS DrugS is performed according to a co-supervision principle with the PhD supervisor as the main supervisor and one further supervisor as a co-supervisor.
Academic Profile of BIGS DrugS

BIGS DrugS is an interdisciplinary, inter-faculty graduate school at the University of Bonn. Its major aim is to provide optimal conditions in education and research for PhD students in the field of drug research. Cornerstones of BIGS DrugS are its strong interdisciplinary approach and cooperation across faculties with professors and PhD supervisors from two large faculties, the Faculty of Mathematics and Natural Sciences and the Faculty of Medicine. Experts in drug research and development as well as pharmacology from both faculties contribute to provide excellent education and training and to create an outstanding research environment for the PhD students. Moreover, collaboration partners from extramural institutions, e.g. the Federal Institute for Drugs and Medical Devices (BfARM), as well as pharma and biotech industries, contribute actively to the PhD program.

Governance within BIGS DrugS and Admission to BIGS DrugS

BIGS DrugS is borne both by professors from the Faculty of Medicine and by professors from the Faculty of Mathematics and Natural Sciences (“Principal Investigators,” or PIs). Interdisciplinarity is a very important characteristic of BIGS DrugS, and in each of the decision-making committees both faculties are equally represented.

Admission to BIGS DrugS is based on the criteria of scientific excellence (above-average exams, recommendation letters, mobility, language skills) and the relevance of the studied subject for the BIGS DrugS program. The BIGS DrugS board is in charge of evaluating applications and deciding on admission.

The two BIGS DrugS speakers (presently Prof. Dr. Christa Müller and Prof. Dr. Alexander Pfeifer) represent BIGS DrugS within the university and to the public. The BIGS DrugS steering committee (consisting of the two BIGS DrugS speakers and two elected PIs) is the decision-making body of BIGS DrugS. It is supported by an advisory board consisting of internationally renowned scientists from outside of Bonn. The BIGS DrugS advisory board supports the education program of BIGS DrugS and advises on the development of the graduate school. All of the PIs and two elected PhD students form the assembly that decides on relevant topics. The BIGS DrugS coordinator (currently Dr. Miriam Schlenk) provides support for all BIGS DrugS members and committees.

Field of study: Natural sciences and life sciences, e.g. pharmacy, drug research, chemistry, biology, molecular medicine, and life sciences

Degree awarded: Dr. rer. nat.

Duration: Three years

Requirements: Registered PhD student at the Faculty of Mathematics and Natural Sciences of the University of Bonn

Application: www.bigs-drugs.uni-bonn.de

Scholarships: Some scholarships are available from different programs

Fee: BIGS DrugS does not raise tuition (for further information see page 11).
Research Program of BIGS DrugS

The research program of BIGS DrugS focuses on basic and applied research related to innovative drugs and therapeutic approaches. In particular, BIGS DrugS is aiming for the identification of novel lead compounds (chemical and biological) as potential drug candidates, the identification of novel pharmacological drug targets, and the development of innovative biotechnological therapeutic concepts like RNA-based therapies and nanotechnological and individualized therapeutic approaches. Research topics of BIGS DrugS mainly include but are not limited to CNS disorders, cancer, and common diseases. A current, new focus is directed toward the development of drugs for rare diseases.

Mentoring and Curriculum

The PhD students are mentored according to a co-supervision principle with the PhD supervisor acting as the main supervisor and one further supervisor of the student’s choice acting as a co-supervisor. Appropriate mentoring is guaranteed by a supervision agreement that is signed by the PhD student, the main supervisor, and the Dean of the Faculty of Mathematics and Natural Sciences. The PhD program of BIGS DrugS is designed for a three-year period. All PhD students of BIGS DrugS are subdivided into classes of one year each that are led by one of the professors as the head of the class.

“BIGS DrugS gives international students great opportunities to enhance their PhD experience. I have the chance of staying up-to-date on the work of other BIGS PhD fellows who are working in other cutting-edge research groups. And, in particular, it gives students the unique chance of inviting gurus from their research field. Also, BIGS offers great social opportunities: as a foreign student in Germany, I made connections with many internationals, growing with them both socially and scientifically.”

Elisabetta de Filippo, PhD student at the PharmaCenter Bonn, University of Bonn
Funding and Support

BIGS DrugS offers access to funding and is constantly seeking additional funding opportunities. PhD students can apply for stipends, grants for consumables, research internships, or travel grants for congress participation. The BIGS DrugS board makes its decisions based on scientific excellence. The coordinator of BIGS DrugS provides ongoing consultation and assistance to all PhD students.

Internality

BIGS DrugS is highly suitable for international PhD students, since the whole program is conducted in the English language. The proportion of international PhD students is currently around 35% within BIGS DrugS. PhD students of BIGS DrugS are encouraged to take international research stays in one of our partner universities, e.g. in the US, the UK, the Netherlands, Poland, Italy, or Brazil. Likewise, PhD students from our partner universities will come to Bonn for research stays and will have access to the BIGS DrugS education program during their stay. During their PhD education and research program, each PhD student will attend at least one international conference and present her/his scientific results.

The curriculum contains obligatory and facultative education elements. PhD students are obliged to attend the Pharmaceutical Colloquium, which is an international guest lecture series with outstanding international scientists in drug research, some of whom will be invited based on suggestions by the PhD students. The BIGS DrugS Colloquium is separately organized for each class of PhD students and enables the PhD students to report about and discuss their research projects with their peers and with the PIs of the graduate school. During the three-year program, each PhD student is encouraged to participate in a congress and present their scientific results there. The Drug Development lecture series is presented in a three-year cycle and is also mandatory for the PhD students. Additionally, BIGS DrugS offers workshops and seminars to teach “transferable skills” and thus prepares PhD students for their future professional career. Internships, e.g. in industry, are also supported.
The Bonn International Graduate School in Mathematics is run by the mathematical institutes of the University of Bonn and the Max-Planck Institute for Mathematics. It offers competitive master’s and PhD programs that cover all major areas in the field of mathematics. Bonn Mathematics provides a rich and active environment for students to develop their own expertise and benefit from direct interaction with leading scientists in their field.
Academic Profile

The BIGS in Mathematics is characterized by a broad thematic range that reflects the wide spectrum of mathematical expertise at the University of Bonn and at the local research institutes. Bonn Mathematics has been distinguished as the best German research department in mathematics and ranks among the top institutions worldwide. Participating institutes of the BIGS in Mathematics are the four mathematical institutes of the University of Bonn as well as the Max-Planck Institute for Mathematics.

Their excellence in research is actively transferred to all areas of teaching and academic training within the BIGS. Bonn Mathematics attracts outstanding students from Germany and around the world and guides them toward research at the forefront of modern mathematics. The BIGS in Mathematics provides new students with support in administrative issues and everyday questions. It helps you to find a German language course and makes it easier to find your way around.

Field of study: Mathematics

Degree awarded: Dr. rer. nat.

Duration: Approx. three years

Requirements: MSc degree in mathematics, or BA degree in mathematics and a qualifying year

Application: via BIGS in Mathematics online application system: www.bigs.math.uni-bonn.de/application/online-application

Scholarships: Hausdorff-Scholarships and Qualification Scholarships

Fee: The University of Bonn and the BIGS Mathematics do not charge tuition (for further information see p. 11).
Courses and Workshops

The BIGS in Mathematics hosts regular workshops on specific topics with local researchers and international guest scientists. An annual poster exhibition offers PhD students the chance to present their achievements and stimulates an active exchange of ideas and experiences among students and visitors. The Plücker, Lipschitz, and Felix Klein lecture series for graduate students provide platforms for discussing the latest research topics and interacting with professors, researchers, guest scientists, and other students. Bonn Mathematics also offers a research-oriented program for master’s students that includes a research thesis and thus supports their early academic independence. Courses and workshops are all held in English.

Funding and Grants

Financial support from the graduate school is available for excellent students. The Hausdorff Scholarships are open to PhD students with an outstanding academic record and provide a monthly grant of €1,468 for up to three years. The Qualifying Grants support promising students with €800/month for one year prior to the beginning of their PhD studies. Foreign students with an excellent bachelor degree can apply for a scholarship of €800/month if they wish to complete their master’s and PhD degrees in Bonn. Numerous other funding possibilities are available in Bonn. The BIGS in Mathematics covers travel expenses for conferences and visits to other universities that are related to the PhD students’ work.
Internationality

Bonn Mathematics has founded the Hausdorff Center for Mathematics, which actively promotes the internationalization of mathematical research and attracts leading academics from all over the world. It organizes international long-term programs, workshops, lectures, and regular events that attract renowned mathematicians from leading institutions worldwide. Students of the BIGS in Mathematics benefit substantially from the inspiring international atmosphere in Bonn and have the chance to discuss their topics with international experts in their field. The constant presence of numerous scientists from all over the world in Bonn initiates and fosters cooperation, triggers new developments, and thereby impacts the future of mathematical research. Moreover, Bonn Mathematics has established international partnerships with prestigious institutions such as the UC Berkeley, Princeton University, University of Kyoto, and the University of Warwick.

Polona Durcik (24), first-year PhD student from Slovenia
Topic: Degenerate homogeneous multilinear forms in low dimensions and low degrees of multilinearity

“The BIGS program in Mathematics offers excellent research conditions. The financial support of BIGS allows full dedication to research. I enjoy the motivating atmosphere, which is enriched by the many nationalities present. To relax after a working week I often make use of the many hiking possibilities in the Rhine valley and its surroundings.”
Bonn International Graduate School of Neuroscience

BIGS Neuroscience is committed to providing a top-level, internationally competitive program in the rapidly developing field of neuroscience. The school is focused on understanding the molecular and cellular mechanisms underlying complex behavior, and the application of these insights to central nervous system disorders.
Outstanding Scientific Education in an Interdisciplinary Community

The Bonn International Graduate School of Neuroscience is an interdisciplinary graduate school within the rapidly developing field of neuroscience. It includes scientists from the University of Bonn Medical School, the Faculty of Mathematics and Natural Science, the German Center for Neurodegenerative Disorders e.V. in the Helmholtz Association (DZNE), and the Caesar Research Institute associated with the Max Planck Association. The graduate school BIGS Neuroscience focuses on the molecular and cellular mechanisms of CNS function, their disease-related changes, and the translation of this knowledge to novel therapies. BIGS Neuroscience is committed to providing outstanding scientific education in advanced approaches and techniques in the field of neuroscience. The graduate school is research oriented, and its primary goal is to prepare students for a competitive career in neuroscience, primarily in the academic sector.

The core of PhD education consists of scientific research conducted in one of the participating research groups of the school. To support the training of students, and to supplement their hands-on laboratory learning, the following curricular elements are offered:

- Students can select from a wide range of practical courses intended to teach laboratory skills in key techniques in neuroscience. The topics of these courses are advanced, incorporating i.e. multiphoton in-vivo imaging techniques, optogenetics, advanced electrophysiology, as well as advanced transgenic and molecular techniques (and many more). Further courses, each composed of 5–9 lectures, are designed to help students from other fields of science to achieve a comprehensive understanding of fundamental principles of Neuroscience. At least one practical course must be selected each year.

- The BIGS Neuroscience lecture series is oriented toward providing first insights into cutting-edge techniques in neuroscience. Interaction and cooperation are major goals of BIGS Neuroscience, and are achieved via regular retreats, student conferences and social events.
“The most demanding challenge during my PhD thesis work is that I always have to react to unpredictable difficulties in my project. Through BIGS seminars, lectures, and courses, you receive a good overview of all different kinds of approaches in other research groups as well as new ideas for your own experiments. Thus, I can also work together with the other junior researchers on solutions to the different problems that arise in the project.”

Christian Hannes, Master in BioSciences, 25 years old, PhD student in 2nd year at DZNE, Lab Prof. Dr. Remy

This lecture series covers the following topics:

- Neural circuits
- Glia and non-neuronal cells
- Neurological diseases
- Essential techniques
- Cognition and systems neuroscience

In year three of the curriculum, BIGS Neuroscience students will have to prove participation in twelve neuroscience seminars from the Bonn Lecture Series in Neuroscience, featuring high-profile external speakers. This series recruits excellent speakers from the following three fields:

1. Cellular and molecular neuroscience
2. Clinical neuroscience
3. Systems neuroscience / Bonn Imaging Seminar

It also integrates the seminars of the SFB 1089 “Synaptic Micronetworks in Health and Disease.” The Bonn Lecture Series in Neuroscience features talks of 45 minutes, followed by a lively discussion. Students are given extra time to talk to the speaker in the absence of group leaders.

These educational measures are complemented by a mentoring and reporting program, comprehensive measures for early career development and support for scientific networking.
Internationality

BIGS Neuroscience offers the opportunity for travel grants to support attendance at high-impact conferences, or at cutting-edge methods courses. Furthermore, the school supports research stays at other universities abroad, building on its close relationships with the Max Planck Florida Institute, Gladstone Institutes for Neurological Disease San Francisco, and Weizmann Institute of Science in Israel, to name a few. These stays can have a maximum duration of two months.

Further Activities

BIGS Neuroscience students are expected to actively participate in the Bonn Neuroscience community. They actively participate in the annual Bonn Brain³ meetings that bring together the whole Bonn Neuroscience community. Furthermore, they take an active role in organizing the yearly BIGS Neuroscience student research schools. These schools offer hands-on courses and seminars in which participants gain insight into cutting-edge neuroscience techniques, featuring internationally renowned scientists.

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Bonn International Graduate School of Oriental and Asian Studies

BIGS-OAS is an interdisciplinary graduate school focusing on cultures and societies in Asia and the Middle East in past and present and their connectedness in a global context. Its research environment, international network, and concept of supervision provide an ideal setting for young researchers to work on innovative projects, have fruitful exchange, and develop their academic network. The course program enables students to improve their theoretical and methodological skills and professional competencies.
Academic Profile

BIGS-OAS is the structured doctoral program of the Institute of Oriental and Asian Studies (IOA), including transregional non-western area studies such as Asian and Islamic Art History, Indology, Near and Middle East Studies, Japanese and Korean Studies, Mongolian and Tibetan Studies, Religious Studies, Chinese Studies, and Southeast Asian Studies. It covers different disciplines from the humanities and social sciences, whose theoretical and methodological approaches are to be made applicable for the needs of Oriental and Asian Studies as well as independent research institutions, international organizations, and museums in Bonn and Cologne. Being part of different and continuously developing research networks and projects, you are encouraged to join and discuss relevant approaches, theories, and research controversies.

Thanks to regular meetings with the supervisor, but also with the peer group of different research fields, you have the opportunity to constantly reflect on your own research and get feedback on the ideas and strategies you develop.

Research Environment

BIGS-OAS provides you with an excellent research environment, being in close cooperation with various local and national university institutions as well as independent research institutions, international organizations, and museums in Bonn and Cologne. BIGS-OAS supports innovative research projects within the frame of its core interests without insisting on a specific thematic priority. You develop your own research project in close cooperation with your supervisor and other affiliated researchers, thereby ensuring the development of your individual academic interests and qualities.
Supervision and Support

BIGS-OAS provides a tight network of academic supervision and everyday support:

- Your doctoral supervisor will support you in each aspect of academic and project-related issues on the basis of your individual needs.
- In disciplinary and interdisciplinary colloquia and workshops you can discuss your ideas and difficulties.
- Your peer group leader guides you through your academic stay at the school and advises you in all broader academic issues in addition to the supervisor.
- The international peer group responds to the specific needs of international students coming into the German academic system.
- The coordinator assists you in all sorts of administrative and everyday concerns.
- Student representatives serve as a central resource for students to address their needs and initiatives to the supervisors and the BIGS-OAS board.

“One of the many attractions of the University of Bonn for international doctoral students is that most of our time is devoted to dissertation research and writing, without the pressure of taking courses or sitting for exams. Additionally, the university, in its continued effort to internationalize the curriculum specifically for international students, has introduced the Bonn International Graduate School (BIGS), a program that provides workshops, conferences, and many other opportunities that support our research and encourage student initiatives.”

Iman R. Abdulfattah, PhD candidate from the USA, 1st semester
Program

BIGS-OAS provides a manifold program that qualifies its doctoral candidates to hold positions in academia and other related professional fields. Scientific skills are promoted in seminars on scientific methodologies and theories relevant in the humanities and social sciences. Furthermore, courses on additional skills such as academic writing and presenting, project and time management, teaching, and career planning are part of the program.

One of the program’s major concerns is to support you in raising your own funding for your research and for living in Germany. This is why workshops on how and where to apply for scholarships and grants are offered as well as individual assistance. Another important requirement is to organize workshops or conferences, publish project relevant articles, teach undergraduates, mentor a B.A. thesis, or gain some other qualification in the fields of knowledge transfer and/or management.

Internationality and Networks

Given its broad regional focus, BIGS-OAS cooperates closely with international partner institutions, especially in Europe and Asia. To strengthen these relationships, BIGS-OAS hosts young researchers from all over the world as regular students or guest researchers.

These ties provide the basis for highly qualitative academic exchange beyond the local and national level and allow you to set up your own networks and future careers. While international conferences and workshops held by the respective departments of the IOA play a vital role in helping you enter the international academic community, you are also highly encouraged to attend international workshops and conferences and go abroad for research trips and field studies.

A Home for International Students

International students will find in BIGS-OAS a welcoming atmosphere and an academic home-away-from-home. Its program is designed to help you pursue your doctorate in an English-language environment, in the heart of Europe. As a vibrant, international city and the capital of the former Federal Republic of Germany, Bonn is ideally situated to help you network internationally and bring you into contact with enterprising professionals in your field of interest.
Since December 2014, the internationalization of the Bonn International Graduate Schools (BIGS) has been reinforced by the project “International promovieren in Deutschland – für alle” (IPID4all). The program is funded by the German Academic Exchange Service (Deutscher Akademischer Austauschdienst, DAAD). Its measures are designed for all doctoral researchers at the University of Bonn, but particularly the BIGS doctoral researchers.

The BIGS internationalization strategy pursues two complementary approaches:

1. Defining shared strategic internationalization goals for the participating fields, thereby creating an integrative framework for internationalizing doctorates at the University of Bonn.

2. Having each Graduate School set individual strategic focuses, thereby implementing the shared goals according to subject-specific requirements.

Strategy

The BIGS internationalization strategy is based on the conviction that internationalization will further improve academic quality assurance and the qualifications of doctoral researchers. At the same time, the strategy recognizes a recent trend toward differentiation of subject-specific doctoral cultures and individual motivations for earning a doctorate.
Shared Internationalization Goals

The internationalization strategy for the participating Graduate Schools pursues three shared goals:

1. **Qualifying young academics from Bonn for international careers by building international networks**

   In order to achieve this goal, IPID4all supports research stays and conference participation for doctoral researchers, strengthens international networks in Bonn, and promotes bi-national doctorates.

2. **Increasing the international attractiveness of the University of Bonn by creating ideal conditions for international doctoral researchers**

   This goal is pursued through measures that improve the recruitment of outstanding international doctoral researchers, as well as through workshops and seminar offerings that are specifically tailored to the needs of international doctoral researchers.

3. **Expanding international collaborations with outstanding international cooperation partners**

   To successfully achieve this goal, joint academic activities with international partners will be increased and the internationalization strategy will continuously be evaluated.

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**COORDINATION OFFICE**

We have set up a Coordination Office at the Bonn Graduate Center to support these measures.

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The Pro-Motion project aims to welcome international doctoral researchers to Bonn and help them settle in. Services include practical assistance, numerous cultural and social events, as well as a welcome meeting for new international PhD students at the beginning of each semester.
International Club

The International Club is a great place to meet German and international students and researchers. The team behind the International Club organizes student orientation activities as well as parties at the end of each semester, film nights, excursions, visits to companies, concerts, etc. Additionally, several social events such as karaoke nights as well as art and cultural nights are offered to allow international students and researchers to get to know Germany and its people. During lecture periods, people from all over the world come to chat, to read newspapers, to work, or simply to have fun.

The International Club also hosts the international choir practice meetings. All interested students are welcome to join.

Workshops

In addition to the numerous courses offered by the university, there are also several workshops. These include an “Intercultural Trainings” workshop and one specifically designed for international doctoral researchers, “Connect Your Career: Managing Dissertation and Career Entry.”

German Language Courses

In cooperation with the association Pro-Integration, German language courses specifically targeting international doctoral researchers are offered at the following levels:

- **Beginner (Level A1/A2)**
- **Intermediate (Level B1/B2)**

Pro-Buddy Program

Every interested international doctoral researcher is put in touch with a “Buddy”, i.e. a German doctoral researcher who will lend a helping hand when it comes to issues concerning German bureaucracy, culture, the University of Bonn, and everyday life.

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Workshops

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Contact

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Office hours for international doctoral researchers
Monday to Friday from 09:00 a.m. to 12:30 p.m. in Room 1.004 (Poppelsdorfer Allee 53).
If you have problems or questions, just stop by.

Sonja Hammer
German Language Courses
phone +49 228 73 7708
e-mail Sonja.hammer@uni-bonn.de

web [www.uni-bonn.de/studying/international-students/german](http://www.uni-bonn.de/studying/international-students/german)

Tutor:
e-mail pro-motion@uni-bonn.de

International Club:
web [www.internationalerclub.uni-bonn.de](http://www.internationalerclub.uni-bonn.de)
Further International Doctoral Programs at the University of Bonn

Center for Development Research (Zentrum für Entwicklungsforschung, ZEF)

ZEF’s doctoral program is part of the Center for Development Research (ZEF), an internationally operating research institute of the University of Bonn. Successful doctoral researchers obtain a degree in sociology, political science, social anthropology, economics, agricultural economics, agriculture, forestry, mathematics, or natural science.

ZEF offers a structured doctoral program taught in English, which enables students to obtain their doctoral degree in three-and-a-half years, on average. ZEF’s educational concept provides excellent and intensive supervision and tutorship.

Dr. Günther Manske and Maike Retat-Amin

e-mail docp.zef@uni-bonn.de
web www.zef.de

Trinational PhD Program Italian Studies (Trinationale Promotion Italianistik)

The Universities of Bonn, Florence and Paris Sorbonne (Paris IV) jointly offer the trinational PhD program “Corso di dottorato di ricerca internazionale in Italianistica.” Doctoral researchers from Bonn spend at least six months in Florence; a research period in Paris is optional within the three years of studies. Doctoral researchers are supervised by faculty members from Bonn and Florence (“co-tutela”). The doctoral diploma in Italian Studies is awarded by all three participating universities.

Prof. Dr. Paul Geyer

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German–Italian Graduate School (Deutsch–Italienisches Promotionskolleg)

The Universities of Bonn and Florence combine their expertise in the binational Graduate School Deutsch–Italienisches Promotionskolleg. Doctoral researchers receive a joint degree from both universities after three years of studies. Every doctoral candidate is supervised by a tutor as well as co-tutor from the partner university. Fields of research covered include 19th century literature, 20th century literature, theory and history of translating and editing, female writing in the 19th and 20th century, literary and historical anthropology, German–Italian studies, and the production and reception of literature.

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European Founding Myths in Literature, Art and Music (Gründungsmynthen Europas in Literatur, Kunst und Musik)

The trinational doctoral program arose from the cooperation between the Universities of Bonn (Germany), Florence (Italy), and Paris IV Sorbonne (France). The doctoral theses will analyze the conditions and practices of the construction of founding myths. They will examine what epochs, which artistic and literary monuments, symbolic figures, figures of thought, sound, and character have had the most reciprocal effects on European cultural history, and ponder which role those monuments will have in creating and shaping the identity of a Europe yet to come. The program consists of lectures, rolling seminars, and small-group discussion. Doctoral researchers spend at least one semester at each participating university and are (co-) supervised by faculty members from Bonn, Florence, and Paris. The graduates are awarded the three national doctoral degrees by all partner universities.

Prof. Dr. Michael Bernsen
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Third-party Funded Graduate Institutions

The various third-party funded graduate programs include Graduate Schools within the German Excellence Initiative, DFG Research Training Groups, NRW Graduate Research Schools, as well as programs sponsored by the European Union or extra-university research institutions.

Further information is available at:
web http://tiny.cc/ai8ttx
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