



The Berlin Mathematical School (BMS) is a joint graduate school of the mathematics departments at FU, HU and TU Berlin. It combines the broad expertise in mathematics at the three Berlin universities into an excellent environment for graduate studies.

The concept of the BMS is based on three key elements:

- A structured study program in Phase I, taught in English, consisting of Basic Courses with a fixed curriculum, a broad spectrum of advanced courses, and many specialized events involving distinguished international visitors and guests;
- A professional management that coordinates all components of the BMS, such as the study and visitor program, a recruiting process that ensures the excellence of admitted students while aiming at gender equality and a broad participation of foreign students, a mentoring program, and outreach activities; and
- Efficient quality management monitoring all aspects of the school, including student progress and performance, mentoring, and the study program.

The BMS is a complete graduate school where students who have completed a first degree (bachelor or equivalent) can directly set their sights on advanced studies and rapid completion of a doctoral degree. The course offerings are designed for talented and determined students from Germany, Europe and all over the world who are up for a challenge.

Studying at the BMS

The BMS study program takes a student with a bachelor's degree through a structured course program, an oral qualifying exam, then directly to a doctoral degree in four to five years. Phase I is the first part of the program that includes a lecture program created specifically for the BMS and coordinated among the three universities. Each semester 7 – 10 Basic Courses are offered in English. Every BMS student should complete at least five of these Basic Courses and two Advanced Courses (including one seminar) within three to four semesters during Phase I. At the end of Phase I is the qualifying exam – an oral exam for admission to the research phase.

Phase II is the research (or doctoral) phase of the BMS program. BMS students should take advantage of the many opportunities offered by Berlin's mathematics research environment. Doctoral research may be supported by one of Berlin's mathematical Research Training Groups (RTG), one of the two International Max Planck Research Schools (IMPRS), the DFG Research Center MATHEON "Mathematics for Key Technologies," the Collaborative Research Center "Space – Time – Matter," the Zuse Institute Berlin (ZIB), or the Weierstrass Institute for Applied Analysis and Stochastics (WIAS).

Attractive conditions for study

The BMS offers a wide range of support to its students and creates outstanding conditions for study. The BMS grants scholarships to some students, however, "conditions for study" does not only refer to money. The BMS provides a working environment at the three universities, supervision, and mentoring for all of our students. Each of the three universities has a BMS area with its own lounge, which is often used as a gathering point for Phase I students between or after lectures. BMS professors look after students individually as their advisors and dialogue partners, to guide them through the manifold opportunities of the Berlin mathematics landscape. Women, in particular, will find special encouragement on their mathematics career path (see 1.2, 1.5 and 1.8). The BMS is actively pursuing the ambitious goal to have half of our students be women.

1.1 BMS Fridays

The BMS Friday Colloquium invites distinguished speakers from around the world to give lectures with a broad overview of their subject so that everybody in the audience can grasp the main concepts involved in the talk. They explain how their research fits into the general picture, remark on open problems, and demonstrate applications and analogies in other fields of mathematics and beyond.



1.2 Kovalevskaya Lunch

Each semester, the BMS designates one of the BMS Friday Colloquia as our Kovalevskaya Colloquium. The Kovalevskaya lecture is preceded by an informal lunch for the female students where they will have an opportunity to talk to an outstanding woman mathematician about career paths, balancing a family and career, and to exchange experiences and receive support and encouragement.

1.3 "What is ...?" Seminar

The "What is ...?" Seminar is a weekly student-run seminar that answers a concise mathematical question in a manner that is accessible to students and mathematicians not familiar with the field. They are aimed at an audience consisting of students of any subject studying in Berlin. It is a great way to meet other graduate students from various fields while enhancing your general knowledge of mathematics. On the weeks of the BMS Fridays, the "What is ...?" seminar is related to and followed by the Friday lecture so that students can better appreciate the Friday talk. On other weeks, the topic of the seminar is varied. BMS students are encouraged to attend these seminars and, if possible, to volunteer to be a speaker.

1.4 Mentoring

The BMS Mentoring Program was developed to provide individual guidance to BMS students in both their academic and personal development. Mentors will pass on their personal experience to help students to develop on their own. The meetings are confidential. Discussions on personal issues is not only allowed, but encouraged. The mentoring program also functions as a way to detect possible difficulties early so that additional support can be offered and, if necessary, countermeasures can be taken.



Phase I students are assigned a mentor from the BMS faculty by the Admissions Committee. It is possible to change the Phase I mentor if a more suitable pairing can be found. The Phase I mentor guides the student for the entire duration of Phase I and after the Qualifying Exam until the start of Phase II.

The Phase I mentor

- advises you on your study program,
- meets with you on a regular basis to evaluate and follow your progress,
- helps you traverse the Berlin mathematics landscape, and
- gives advice about research groups and scholarship possibilities.

Each **Phase II** student has a scientific advisor who provides support in all aspects relating to the dissertation, including advice on choosing the right conferences and publishing articles. Phase II students will additionally have a separate mentor who can

- help broaden your professional network,
- suggest employment opportunities and funding possibilities,
- offer a second opinion with regard to your research or career plan, and
- provide support if you encounter problems with your advisor.

Both the advisor and the mentor can assist students in forming career plans and in establishing a professional network. The Phase II mentor guides the student for the entire duration of Phase II.



Phase II students can choose a mentor on their own from our BMS Faculty list or one can be suggested to you by our Mentoring, Gender and Diversity Officer.



Contact person: **Tanja Fagel** (fagel@math-berlin.de)

1.5 Soft-Skill Seminars

The BMS offers soft-skill seminars throughout the year. These workshops help you develop skills that are useful, and often necessary, for a career in mathematics. They usually take place on Friday mornings (before the BMS Friday Colloquium) or on weekends. So far we've had workshops on intercultural communication, effective presentation techniques, communication and negotiation, organization and work methods, mathematical typesetting in LaTeX, mathematical graphics, writing mathematics, teaching mathematics, project management, networking, targeting career plans, and applying for jobs. Other possible topics include leadership skills, moderation, and teamwork. Let us know if you would like to take part in these or other workshops.

You can find the current list of soft-skill seminars on our website: <http://www.math-berlin.de/Soft-Skills-Seminars.html>

Contact person: **Tanja Fagel** (fagel@math-berlin.de)

1.6 Diversity

The BMS embraces diversity be it in terms of gender, country of origin, religion, ethnic background, sexual orientation, illness or disability, or any other aspect that makes us different. We actively strive to create an environment that welcomes diversity, facilitates the exchange of new perspectives and creates a respectful, accepting environment for life in Berlin, for work at the universities and institutes, and for research and teaching.

The BMS committee on Mentoring, Gender and Diversity overlooks all BMS projects including, but not limited to, advertising, recruiting, and Phase I and Phase II studies. Our students come from all over the world. As of 2010 we have students from Albania, Argentina, Australia, Austria, Bulgaria, Cameroon, Canada, China, Chile, Colombia, Denmark, Estonia, Germany, Greece, Hong Kong, Hungary, Iceland, India, Iran, Ireland, Israel, Italy, Madagascar, Mexico, Poland, Romania, Russia, Serbia, Singapore, Spain, Thailand, the UK, the USA and Vietnam. BMS aims to have 50% international students and 50% female students. As of November 2009, the proportion of international students is more than 38% of our student body and the proportion of women is 27%.

1.7 Buddy Program

BMS offers a buddy program to welcome new students to Berlin. A buddy will pick you up at the airport when you first arrive and help you get settled in. Please contact the BMS One-Stop Office to be assigned a buddy.

Contact person: **Anja Bewersdorf** (bewers@math-berlin.de)



1.8 Support for Students with Children

The BMS provides additional support to students with children and students who are pregnant. We will accommodate your needs as a parent with individual solutions, for example by arranging for time off or reducing your study load. In order to cover part of the costs associated with childcare, the BMS will supplement the BMS scholarship by 400 € /month for the first child and 100 € /month for every additional child in the care of a BMS student. FU, HU and TU have suitable rooms for parents with children. The BMS Lounge at TU has a nursing room which doubles as a "think cell." There are also daycare facilities on campus. We will be happy to help you in all matters related to childcare.

For more information visit:

<http://www.math-berlin.de/For-Student-Parents.html>

Contact person:

Tanja Fagel (fagel@math-berl.in.de)

Family Support Centers at FU, HU, and TU

In addition to the support provided by the BMS, student parents can also take advantage of the services provided by the three universities. Each university has a family-friendly personnel policy and university structure for all of its members to ensure their students, faculty and staff can balance their work and home life.

@FU Berlin

Rudolfoweg 25–27 (2nd floor), 14195 Berlin

phone: +49 30 838 511 37

fax: +49 30 838 545 25

e-mail: familienbuero@fu-berlin.de

Office hours:

Mon – Thu: 9.00 am – 12.00 am

Personal consultations are offered by appointment. Please call to schedule an appointment.

@ HU Berlin

Unter den Linden 6, room 3082, 10099 Berlin

phone: +49 30 2093 2191

fax: +49 30 2093 2132

e-mail: familienervice@uv.hu-berlin.de

Office hours:

Mon, Tue, Thu: 1.00 pm – 4.00 pm

Wed, Fri: 9.00 am – 12.00 am

@ TU Berlin

Straße des 17. Juni 135, room H 1111 (1st floor), 10623 Berlin

phone: +49 30 314 2332

Telefax: +49 30 314 29861

e-mail: familienbuero@zuv.tu-berlin.de

Office hours:

Tue: 10.00 am – 12.00 am

Personal consultations are offered by appointment. Please call to schedule an appointment.

Each of the three universities' support for families is audited by the Hertie Foundation.

1.9 BMS Student Representatives

The BMS Student Representatives advocate the interests of the BMS student body to the BMS administration and faculty. They are elected annually by you, the BMS students. The Student Representatives actively participate in BMS board and committee meetings to make sure your voices are heard. Students who are interested in seeing the administrative side of academia are encouraged to volunteer to be a candidate.

For more information, visit:

<http://www.math-berlin.de/Student-Representatives.html>

e-mail: stud-rep@math-berlin.de

