

Deutscher Akademischer Austauschdienst German Academic Exchange Service

# INTERNATIONAL PROGRAMMES

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## Master's degree



Physics University of Bonn • Bonn

## Overview

Degree	Master of Science in Physics
In cooperation with	University of Cologne
Teaching language	• English
Languages	Courses are held in English. Master's theses are usually written in English.
Full-time / part-time	• full-time
Programme duration	4 semesters
Beginning	Winter semester
Application deadline	<ol> <li>December for national and international students (scholarship programme)</li> <li>May for non-EU students (regular: no scholarship)</li> <li>July for EU students (regular: no scholarship)</li> <li>National and international students interested in joining the BCGS scholarship programme have to apply by 1 December for the following winter semester. Selected applicants will be invited to an (online) "admissions academy" (February/March).</li> </ol>
Tuition fees per semester in EUR	None
Combined Master's degree / PhD programme	No
Joint degree / double degree programme	No
Description/content	The Bonn-Cologne Graduate School of Physics and Astronomy is a joint programme of graduate studies between the Universities of Bonn and Cologne. It was funded through the Excellence Initiative from 2007 to 2019. Specialisation fields are theoretical and experimental particle and hadron physics as well as photonics and condensed matter physics, and mathematical physics. In addition, courses broadening their expertise into neighbouring, related fields enable students to understand interdisciplinary contexts. These include classes from the Master of Astrophysics programme offered by our department as well as courses at our partner university in Cologne.

## **Course Details**

Course organisation	All graduate studies (for Master and PhD) at our department are coordinated by the Bonn-Cologne Graduate School of Physics and Astronomy (BCGS). The Bonn-Cologne Graduate School of Physics and Astronomy, a joint programme of graduate studies between the Universities of Bonn and Cologne, leads students with a BSc through an MSc phase directly to doctoral studies. The Master's programme includes one year of coursework: compulsory theoretical and experimental lecture courses and laboratory work, specialisation courses, elective advanced lectures and seminars in the fields of theoretical or experimental particle physics, condensed matter and photonics. During the second year, work on a research-oriented thesis is required, including project planning.
A Diploma supplement will be issued	Yes
International elements	<ul> <li>International guest lecturers</li> <li>Specialist literature in other languages</li> <li>Projects with partners in Germany and abroad</li> </ul>
Integrated internships	Research internships are a key element in the research training of the graduate school. As members of a research group, the students start their first small research project. This not only provides initial research experience but also helps with the selection of an MSc project. The student becomes a temporary member of a research group for a typical duration of four weeks. Participation in at least one research internship is mandatory for first-year stipend students and a prerequisite for the honours certificate.
Course-specific, integrated German language courses	No
Course-specific, integrated English language courses	No

## Costs / Funding

Tuition fees per semester in EUR	None
Semester contribution	Students must pay a social fee of approx. 330 EUR per semester ("Sozialbeitrag"), which is used to support student activities and provides free public transport.
Costs of living	Approx. 950 EUR per month
Funding opportunities within the university	Yes

Description of the abovementioned funding opportunities within the university Full scholarships for highly qualified students are available in the stipend programme. Members of the stipend programme receive 934 EUR per month for a maximum of two years. Interested students have to apply for the BCGS stipend programme (deadline: 1 December for the following winter semester).

## **Requirements / Registration**

Academic admission requirements	A qualified Bachelor's degree in physics or equivalent is required containing 15 ECTS on theoretical physics (quantum mechanics and statistical physics), 15 ECTS on experimental physics (atomic, solid-state, nuclear and particle physics) as well as 15 ECTS on lab courses.
Language requirements	TOEFL (80 points, Internet-based) or equivalent, e.g. IELTS (score 6.5)
Application deadline	<ol> <li>December for national and international students (scholarship programme)</li> <li>May for non-EU students (regular: no scholarship)</li> <li>July for EU students (regular: no scholarship)</li> <li>National and international students interested in joining the BCGS scholarship programme have to apply by 1 December for the following winter semester. Selected applicants will be invited to an (online) "admissions academy" (February/March).</li> </ol>
Submit application to	We only accept online applications. See https://www.gradschool.physics.uni-bonn.de/applying for details.

## Services

Possibility of finding part- time employment	Student assistantships may be available during the programme.
Accommodation	Accommodation is available through the "Studierendenwerk Bonn" (https://www.studierendenwerk-bonn.de/en/accommodation/) or on the private housing market. The office for international students provides assistance in finding accommodation.
Support for international students and doctoral candidates	<ul> <li>Welcome event</li> <li>Specialist counselling</li> <li>Visa matters</li> </ul>
General services and support for international students and doctoral candidates	Office for international students (support with administrative formalities), mentor system (individual academic counselling), tutor system (studying in small learning groups), cultural and social programmes (excursions, visits, etc.), intensive language courses in German

### **Our Partners**



## University of Bonn



As the former capital of Germany and the seat of the United Nations in Europe, Bonn stands for internationality and diversity. As a globally renowned research institution, this also applies to the university: In addition to research and teaching collaborations with partners around the globe, it is characterised not least by its diverse student body with more than 5,000 students and doctoral candidates from over 135 countries.

According to the Times Higher Education Ranking 2024, the University of Bonn is one of the most international universities in the world and occupies the top position within the diverse university landscape of North Rhine-Westphalia. This international orientation has a long tradition: the university has maintained relationships with universities abroad for a long time. For example, there are interdepartmental cooperation agreements with almost 40 universities around the world.

In addition, the University of Bonn cooperates with 300 partner universities within the framework of student exchange programmes. The internationality of the University of Bonn is also reflected in its range of courses: There are now 39 international degree programmes, many of which are taught entirely in English or other foreign languages or lead to a double degree with a partner university.



### University location

Bonn is a beautiful and historic city located on the banks of the Rhine and also known as the birthplace of Ludwig van Beethoven. At the same time, it is a modern, lively and cosmopolitan city with a high quality of life. Bonn is also the German city of the United Nations with 25 UN institutions and many international organisations. With over 4,500 international students from more than 135 countries, the university contributes significantly to the international flair of the city of Bonn.

## Contact

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Course website: https://www.physik-astro.uni-bonn.de/en/studying/degree-programs/master-of-science-in-physics?set\_language=en

f https://www.facebook.com/BCGSPhysAstro/

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## **International Programmes in Germany - Database**

#### www.daad.de/international-programmes www.daad.de/sommerkurse

#### Editor

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### GATE-Germany

Consortium for International Higher Education Marketing www.gate-germany.de

### Disclaimer

The data used for this database was collected and analysed in good faith and with due diligence. The DAAD and the Content5 AG accept no liability for the correctness of the data contained in the "International Programmes in Germany" and "Language and Short Courses in Germany".

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