

# Welcome to Freie Universität Berlin

**Mathematics (M.Sc.)**  
**Summer semester 2021**



Foto: Bavaria Luftbild Verlags GmbH

# Who are we?

## Prof. Dr. Klaus Altmann

- ▶ Professor for mathematics at Freie Universität Berlin
- ▶ Chairman of mathematics master's program
- ▶ <http://www.math.fu-berlin.de/altmann/>

## Isa Adriane Günther

- ▶ Student of mathematics and English philology at Freie Universität Berlin
- ▶ Student counselor for mathematics
- ▶ [www.mi.fu-berlin.de/en/stud/beratungszentrum/kontakt/stud\\_kontakt/math/isa\\_adriane\\_guenther.html](http://www.mi.fu-berlin.de/en/stud/beratungszentrum/kontakt/stud_kontakt/math/isa_adriane_guenther.html)

# Student Advisory Service

**Isa Adriane Günther**

I can help you with...

- ...planning and organizing your studies
- ...questions about study regulations
- ...questions about the recognition of credits
- ...module registration
- ...counseling for international students
- ...and much more!



**E-Mail: [studienberatung@math.fu-berlin.de](mailto:studienberatung@math.fu-berlin.de)**

# Student Advisory Center

## Students advising students

- ▶ Student advisory service
- ▶ International Counseling
- ▶ Mentoring
- ▶ EinS@FU-Mentoring



Student Advisory Center/Studentisches Beratungszentrum

Arnimallee 3 / Room 023

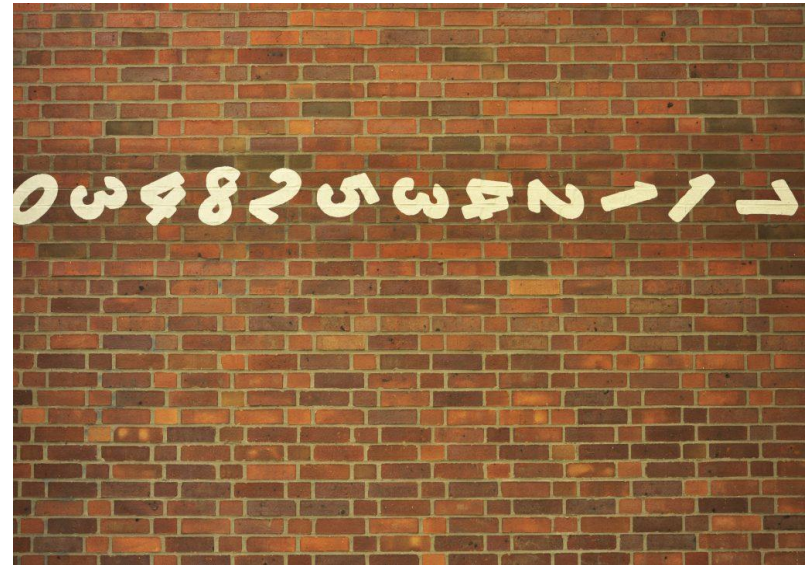
[www.mi.fu-berlin.de/en/stud/beratungszentrum/index.html](http://www.mi.fu-berlin.de/en/stud/beratungszentrum/index.html)

# Mathematics at FU Berlin

- ▶ 19 professors, 18 private lecturers
- ▶ 33 working groups

The mathematics master's program at Freie Universität especially profits from the following top research areas:

- Algebra, Analysis, Geometry, Number Theory and Topology
- Scientific Computing and Bioinformatics
- Discrete Mathematics and Algorithms



# Mathematics Master's Program

- Standard Period of Study: **4 semesters** (= 2 years)
  - It is possible to study longer than 4 semesters.
  - Winter term: October–March
  - Summer term: April – September
- complete 120 LP (credit points) to obtain master's degree
  - about 30 credit points per semester
- final grade: 1/3 master's thesis and 2/3 exams and seminar grades

# What are LP (ECTS)?

- **1 LP  $\approx$  30 hours of work**
  - preparation
  - attendance
  - exercises
- earn LP by successfully completing modules
- Module example:
  - ✓ Lecture: - **exam**
  - ✓ Tutorials: - regular and **active participation**
    - a total of **50%** of the points on weekly **exercise sheets**

# What are LP (ECTS)?

- Take about **30 LP per semester** (less is possible).
- For a course/module with **two lectures a week**, you usually get **10 LP**
- many courses are structured like this
- => choose about 3 modules per semester



**The courses are taught in...**

**English**

**(and sometimes in German.)**

# Which modules can I take?

- Current Offer: Course Catalog: ([www.fu-berlin.de/vv/en/fb](http://www.fu-berlin.de/vv/en/fb))
- General Offer: Study and Examination Regulations ([www.mi.fu-berlin.de/en/math/stud/mathemaster/index.html](http://www.mi.fu-berlin.de/en/math/stud/mathemaster/index.html))

# Which modules do I have to take?

- Study and Examination Regulations ([www.mi.fu-berlin.de/en/math/stud/mathemaster/index.html](http://www.mi.fu-berlin.de/en/math/stud/mathemaster/index.html))

# Structure of the Master's Program

Basic Modules		Intermediate and Advanced Modules	Supplemental Modules
5* 10 LP = 50 LP		5 + 5 = 10 LP	30 LP
Algebra I	Algebra II	Aufbaumodul: Part III	Ausgewählte Themen A, B, C: (10 LP)
Differential Geometry I	Differential Geometry II		
Discrete Geometry I	Discrete Geometry II		
Discrete Mathematics I	Discrete Mathematics II		Spezielle Aspekte A, B, C: (5 LP)
Dynamical Systems I	Dynamical Systems II		Aktuelle Forschungsthemen A, B, C: (5 LP)
Numerics II	Numerics III	Vertiefungsmodul: Seminar	Spezielle Forschungsaspekte: (5 LP)
Partial Differential Equations I	Partial Differential Equations II		Forschungsprojekt: (10 LP)
Stochastics II	Stochastics III		
Topology I	Topology II		
	Number Theory II		
<b>Master's Thesis</b>			
30 LP			

# In which order should I choose these modules?

- first modules with lower number (an advice not a law): take Algebra I before you take Algebra II
- for some modules prior knowledge requirements are listed in course description
- complete 60 LP before you start your master's thesis
- in order to take an advanced module, you need to have completed the corresponding basic and intermediate module
  - Algebra I/II + Algebra III => Master's seminar Algebra (Algebra IV)

# For your first semester (summer term 2021):

- **Basic modules you could take are for example:**
  - Partial Differential Equations I
  - Topology I
  - Discrete Mathematics I
  - Stochastics II
- depending on your prior knowledge, you can also take intermediate and supplemental classes
- it is possible to take classes at TU Berlin and HU Berlin

# Exemplary Study Plan

Basic Modules			Intermediate + Advanced Modules		Supplemental Modules	LP
Algebra I 10 LP	Discrete Geometry I 10 LP	Numerics II 10 LP				30
Stochastics II 10 LP	Discrete Geometry II 10 LP				10 LP In modules of your choice	30
			Discrete Geometry III 5 LP	Master-seminar Discrete Geometry 5 LP	20 LP in modules of your choice	30
Master's Thesis (in Discrete Geometry) 30 LP						30

# Exams

- **first exam** at the end of lecture time: mid-/end- February/July
- **second exam** before beginning of the new semester: ~ beginning of March/October
- If you decide to take the first and second written exam, **the better grade counts.**
- a total of **4 attempts** to pass a course (not attending does not count as an attempt)
- no special **registration for the exam** required (unless your teacher tells you otherwise)
- **Grading System:**  
1,0 1,3 1,7 2,0 2,3 2,7 3,0 3,3 3,7 4,0 5,0

# Exams

- ▶ Exam methods are still uncertain due to the coronavirus pandemic
- ▶ Registered on Campus Management
- ▶ Prüfungsbüro (Examination Office)
  - ▶ Currently telephone consultation hours
  - ▶ <http://www.imp.fu-berlin.de/fbv/pruefungsbuero/index.html>

Read your [study and examination regulations](#) for more information.



# Studying in times of the Corona pandemic

- No events with attendance
- Various offers online:
  - [Whiteboard](#) and Zedat-E-Mails
  - Register with Zedat account
- WebEx
- Updates can be found here (<https://www.fu-berlin.de/en/sites/coronavirus/index.html>).

**Goodwill and creativity!**

# To Do

## ▶ **Modules:**

- ▶ Register on Campus Management (University: study certificates)  
<https://lb.ecampus.fu-berlin.de>
- ▶ Register on Whiteboard (Department: homework sheets, course information )  
<https://mycampus.imp.fu-berlin.de/portal/site>

## ▶ **In general:**

- ▶ Sign up for the department account  
<https://portal.mi.fu-berlin.de/login>
- ▶

# Department Account

## Why?

- Use computers on campus
- Use printers on campus
- Free Software<sup>5</sup>
- Receive department's e-mails

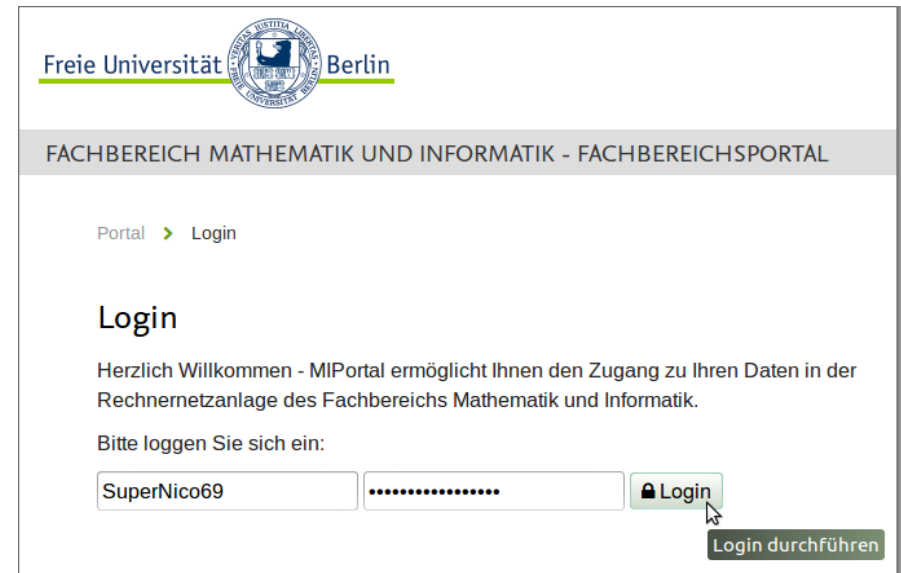
## How?

One-time Login to department's portal<sup>6</sup>  
with ZEDAT-account.

**Important:** Please read your e-mails; you can automatically forward them to your primary e-mail address.

<sup>5</sup> <https://www.zedat.fu-berlin.de/Benutzerservice/Software>

<sup>6</sup> <https://portal.mi.fu-berlin.de>



The screenshot shows the login page of the department portal. At the top, it features the logo of Freie Universität Berlin and the text 'FACHBEREICH MATHEMATIK UND INFORMATIK - FACHBEREICHSPORTAL'. Below this, there is a breadcrumb trail 'Portal > Login'. The main heading is 'Login'. A welcome message reads: 'Herzlich Willkommen - MIPortal ermöglicht Ihnen den Zugang zu Ihren Daten in der Rechnernetzanlage des Fachbereichs Mathematik und Informatik.' Below the message, it says 'Bitte loggen Sie sich ein:'. There are two input fields: the first contains the username 'SuperNico69' and the second contains a masked password '.....'. To the right of the password field is a 'Login' button with a lock icon. A mouse cursor is hovering over the button, and a tooltip 'Login durchführen' is visible.

# Support for international students

**International tutor: Verena Deege ([verena.deege@fu-berlin.de](mailto:verena.deege@fu-berlin.de))**

**International mentor: Isa Adriane Günther**

**To get all relevant information about support in English, please register on Whiteboard for the course:**

**Mentoring für Internationale Studierende (19000246)**

**And come to the international campustour (online) on Friday at 10am!**

**<https://www.mi.fu-berlin.de/en/stud/beratungszentrum/erstsemester/index.html>**

# Support for international students

For further information, please have a look on our website:

**International Counseling:** <https://www.mi.fu-berlin.de/en/stud/beratungszentrum/studienberatunginternational/index.html>

Have a good time and do not hesitate to contact us, if you need any help!

# Thank you for joining the meeting.

**This presentation will be uploaded on our webpage**

- <https://www.mi.fu-berlin.de/en/stud/beratungszentrum/erstsemester/index.html>

**Are there still any questions?**

- Use the chat box.
- Unmute yourself and talk to us.

**Good luck with your studies!**

