

Guidelines for Application

**Graduate School of Mathematics,
Kyushu University
(Doctoral Course)**

International Program in Mathematics

Special Screening for

China Scholarship Council Applicants

for Admission in Autumn 2024



International Doctoral Program in Mathematics

This program offers international students a doctoral course in mathematics (after finishing master course), in topics ranging from pure mathematics such as algebra and geometry to applied mathematics such as probability, statistics, and computational mathematics. For details, please visit the following websites:

Graduate School of Mathematics

<https://www.math.kyushu-u.ac.jp/eng/>

<https://www.math.kyushu-u.ac.jp/eng/entryexams/view/1>

China Scholarship Council (CSC) Applicants applying for the 2024 International Doctoral Program in Mathematics, the Graduate School of Mathematics at Kyushu University, should follow the following procedures. The course will commence on October 1, 2024. All thesis work will be carried out in English.

Those who are interested in the program are requested to choose a professor or an associate professor of our graduate school as a supervisor whose area of expertise most closely matches your research topic. The list of the faculty members can be found on our web page

<https://www.math.kyushu-u.ac.jp/eng/teachers/index>

Before starting the application procedure, at the earliest opportunity, an applicant is requested to obtain consent from a potential supervisor and confirm whether he/she can accept the applicant. To find the contact information, simply type his/her name in the search box in the Kyushu University website.

For application procedure, you are requested to send us documents for screening following the instructions below and, simultaneously, contact to the Beijing Office of Kyushu University as below.

Beijing Office of Kyushu University : kyudaibeijing@163.com

1. Department and number of students to be admitted

Department	Number of students
Mathematics	Several students

In this program, students are to perform their own research in mathematics. The main goal is to become researchers and/or educators in mathematics. Those who complete this program will be awarded a Doctoral Degree in Mathematics (Doctor of Philosophy [Mathematics]).

2. Qualification for application

Applicants must meet the following two requirements.

- (1) Applicants for CSC who are willing to obtain a Doctoral degree of Graduate School of Mathematics, Kyushu University.
- (2) Have a nationality other than Japanese, hold (or are expected to hold) a resident status of “Student”, and have

obtained (or will obtain) a Master's degree or a Professional degree by the end of September, **2024** in China.

3. Documents to be submitted

- (1) Application form and curriculum vitae. (Use the form included in the last part of this guideline.)
- (2) Academic transcript (of all applicable undergraduate and graduate course work) and certificate of completion (or expected completion).
- (3) Recommendation letter issued by the applicant's supervising professor, a member of teaching staff, or a supervisor in the employing body who has personal knowledge of the applicant and who is familiar with the details of the applicant's academic accomplishments. (The letter must be in a sealed envelope as it is confidential.)
- (4) Master's thesis (A copy is acceptable. If the thesis is written in a language other than Japanese or English, a summary of Master's thesis written in Japanese or in English must be attached.) One can substitute it with a detailed research plan toward one's Master's thesis, which shows one's academic background and mathematical ability. Note that the interview in the screening will be partly based on this document.
- (5) Certificate of English language ability. (If the applicant has taken a standardized English proficiency test, such as TOEFL (Test of English as a Foreign Language), IELTS (International English Language Testing System, Academic Module) or Cambridge ESOL Examinations (FCE, CAE or CPE), submit (a copy of) the certificate of the applicant's official score.)
- (6) Copy of applicant's passport. (Photo/ID page.)
- (7) Copies of both sides of Residence Card or Residence Certificate. (Only for those living in Japan)
- (8) A photo of applicant (taken within the past 3 months, 5.5 cm × 4.5 cm, should be attached to the application form)
- (9) Receipt of payment of application fee. (For details, refer to item 4 below.)

(Note)

Documents must be written either in Japanese or in English. In case any of the documents are written in a language other than Japanese or English, attach Japanese or English translation.

4. Application fee and methods of payment

Application fee is 30,000 yen.

Application fee must be paid either at a convenience store or by credit card, Union Pay or Alipay after registering at the following website ("e-shiharai site", <https://e-shiharai.net/> or <https://e-shiharai.net/English/>). (Payment at a convenience store is available only in Japan and the guidelines and the website are offered only in Japanese.) Note that

the amount paid for application fee will not be refunded for any reason once it is paid.

For the details of payment method, please refer to “コンビニエンスストア・クレジットカード・中国決済での入学検定料払込方法 (How to make the payment for the application fee at a convenience store, by credit card, Union Pay and Alipay)” or “How to make the payment for the application fee by credit card, Union Pay and Alipay” on pages 11-12 of this guideline. The transfer fee should be covered by the applicant.

(1) Payment at convenience stores

Paste “入学検定料・選考料・取扱明細書(Certificate of payment of application fee)” on “Form for submission of the certificate of payment of application fee” and submit it with other application documents.

(2) Payment by credit card, Union Pay or Alipay

Submit the printed “Result” page with other application documents.

(3) Payment period

November 4 (Sat.), 2023 to December 8 (Fri.), 2023

(Note) For questions regarding the procedures, etc. on the e-shiharai site, applicants should check the information on the website (<https://e-shiharai.net/Syuno/FAQ.html> or <https://e-shiharai.net/English/sss/FAQ.html>) , “FAQ” or “Common Questions about Payment”, and if you have any further questions, please ask E-Service Support Center directly.

5. Application period:

December 4 (Mon.), 2023 to December 8 (Fri.), 2023 5:00 p.m. (Japan time)

6. Application documents should be sent to the address

Student Support Section, Graduate School of Mathematics, Kyushu University
W1-A-305,744 Motooka, Nishi-ku, Fukuoka 819-0395, Japan

On the front of the envelope, write clearly in **red color**

“Application form for Doctoral Course of the Graduate School of Mathematics enclosed”.

The application documents must arrive at the Student Support Section by the end of the application period.

(Note)

The applicants are advised to use registered mail in order that the documents should arrive surely before the deadline.

7. Screening process

Screening of applicants is conducted based on submitted documents and academic examination by telephone or internet (Zoom or its equivalent). Academic examination shall be given on the applicants’ specialized subjects, and English language, in written or oral form. The method and schedule of academic examination will be informed after your application documents have been accepted.

8. Announcement of screening result and enrollment procedure

The application ID numbers of successful applicants will be posted on the website as follows. The result will also be mailed to the address written on the application form on the same date.

- (1) Website: <https://www.math.kyushu-u.ac.jp/eng/>
- (2) Date and time: February 26 (Mon.), 2024, 10:00 a.m. (Japan time)
- (3) The successful applicant will receive a document that certifies the result of screening by Kyushu University and should proceed to the application procedure to CSC with it. On receiving the result of acceptance or rejection from CSC, the applicants should promptly send Certificate of CSC (photocopy) to the Student Support Section, Graduate School of Mathematics, Kyushu University.
(Note) In case you are not adopted as a CSC scholar (although you pass this entrance examination), you still have chance to enroll in the international program in mathematics at Kyushu University as a privately financed international student and are requested to inform the Student Support Section whether you will enroll in the program or not.
- (4) Enrollment documents will be sent out in early August 2024, and successful applicants must then complete the enrollment procedures by the date specified.
- (5) Admission fee, tuition:
Admission fee: 282,000 yen (to be paid by the end of the period of the enrollment procedures)
Tuition: 267,900 yen per semester (annual total 535,800 yen)
(Note) The amounts above are subject to change without prior notice. New fees will be applied if changed.
CSC Scholars are exempted for the payment of the tuition.

9. Applicants with Disabilities

Kyushu University provides consultation for applicants with disabilities who may require special arrangements during the entrance examinations or in classes after enrollment.

Please contact the Student Support Section, Graduate School of Mathematics prior to the application process as soon as possible as it sometimes takes extra time to decide on the arrangements depending on the situation.

No special arrangements will be made if no contact is made by December 8 (Fri.), 2023.

10. Miscellaneous remarks

- (1) Any documents submitted, such as application forms, will not be returned and the application fee will not be reimbursed.

- (2) An admission may be cancelled, if there is any wrongdoing or misconduct related to application documents.
- (3) For more details of the screening, please contact the address below.
- (4) Any changes due to COVID-19 will be announced via the above website of the Faculty of Mathematics. In addition, the school may take separate actions depending on the situation.

○ **Use of personal information**

1. Personal information provided for your application will be used exclusively for Kyushu University's screening process and the following purposes:
 - (1) The addresses, names, etc. of the successful applicants may be used for enrollment procedures, etc.
 - (2) The academic transcript may be used for screening about financial aid.
2. Academic records and other personal information used for screening of applicants may be used, in a form in which the individual is unidentifiable, for surveys and research concerning the screening of applicants for the Graduate School of Mathematics.
3. Personal information provided for your application will not be used for any other purposes or provided to a third party without your permission, except in cases stipulated in the Act on the Protection of Personal Information and other related laws.

Student Support Section, Graduate School of Mathematics, Kyushu University W1-A-305,744 Motooka, Nishi-ku, Fukuoka, 819-0395 Japan TEL: +81-92-802-4038 FAX: +81-92-802-4016 E-mail: rixgksien@jimu.kyushu-u.ac.jp

九州大学大学院数理学府指導教員一覧

List of faculty of the Graduate School of Mathematics, Kyushu University

【教 授】

(令和6年4月1日の予定スタッフ)

Professor

(As of April 1, 2024)

教員名 Name	研究指導内容 Research Keywords
石井 豊 ISHII Yutaka	力学系理論, フラクタル, 複素力学系 Dynamical System Theory
稲濱 譲 INAHAMA Yuzuru	確率解析, 無限次元解析, ラフパス理論 Stochastic Analysis, Rough Path Theory
翁 林 WENG Lin	代数幾何学, 数論的幾何学, 整数論 Algebraic and/or Arithmetic and/or Complex Geometry, Number Theory
岡田 拓三 OKADA Takuzo	代数幾何学 Algebraic Geometry
落合 啓之 OCHIAI Hiroyuki	代数解析学, 表現論, 特殊関数 Algebraic Analysis, Representation Theory, Special Function
鍛冶 静雄 KAJI Shizuo	トポロジー, 代数的位相幾何学, 応用トポロジー Topology, Algebraic Topology, Applied Topology
梶原 健司 KAJIWARA Kenji	可積分系, 離散微分幾何 Discrete Differential Geometry, Integrable Systems
**金子 昌信 **KANEKO Masanobu	整数論, 多重ゼータ値, モジュラー形式 Number Theory
神本 丈 KAMIMOTO Joe	複素解析 Complex Analysis, Partial Differential Equations
神山 直之 KAMIYAMA Naoyuki	離散最適化, グラフ理論, 計算量理論 Discrete Optimization
川野 秀一 KAWANO Shuichi	数理統計学, 統計科学, 多変量解析, ベイズモデリング Mathematical Statistics, Statistical Science, Multivariate Analysis, Bayesian Modeling
岸本 大祐 KISHIMOTO Daisuke	トポロジー, 代数トポロジー, 組み合わせ構造 Topology, Algebraic Topology, Combinatorial Structure
小林 真一 KOBAYASHI Shinichi	整数論 Number Theory
※権 寧魯 ※GON Yasuro	数論, 保型形式, 跡公式 Number Theory
佐伯 修 SAEKI Osamu	位相幾何学, 微分トポロジー, 特異点論, DNA結び目 Topology, Singularity Theory, Differential Topology, DNA Knots
笹平 裕史 SASAHIRA Hirofumi	トポロジー, ゲージ理論, Floer理論 Topology, Gauge Theory, Floer Theory
白井 朋之 SHIRAI Tomoyuki	確率論, ランダム行列, ランダム場, ランダムトポロジー Probability Theory
※角 俊雄 ※SUMI Toshio	代数的トポロジー, 変換群論 Topology, Transformation Groups
瀬片 純市 SEGATA Jun-ichi	非線形偏微分方程式, 分散型方程式, 双曲型方程式, 調和解析学 Partial Differential Equations, Harmonic Analysis

教員名 Name	研究指導内容 Research Keywords
辻井正人 TSUJII Masato	力学系理論, エルゴード理論 Dynamical Systems, Ergodic Theory
富安亮子 OISHI-TOMIYASU Ryoko	応用代数・数論, 数理結晶学, アルゴリズム Applied Algebra, Lattice, Quadratic Form, Mathematical Crystallography
縫田光司 NUIDA Koji	数学的暗号理論, 組合せ論的群論 Mathematical Cryptography, Combinatorial Group Theory
*原 隆 *HARA Takashi	数理物理学, 確率論モデルと臨界現象, 場の量子論と臨界現象 Mathematical Physics
廣島文生 HIROSHIMA Fumio	場の量子論, 作用素論的スペクトル解析, 汎関数積分 Quantum Field Theory, Operator Theory and Spectral Analysis, Functional Integrations
廣瀬 慧 HIROSE Kei	数理統計学, 多変量解析, 時系列モデリング, 潜在変数モデル Computational Statistics, Machine Learning
*福本康秀 *FUKUMOTO Yasuhide	流体力学, 渦運動, 電磁流体力学 Fluid Mechanics
藤澤克樹 FUJISAWA Katsuki	最適化問題, グラフ解析, 高性能計算 Optimization Software, Graph Analysis, High-performance Computing
増田俊彦 MASUDA Toshihiko	作用素環 Operator Algebras
**溝口佳寛 **MIZOGUCHI Yoshihiro	ソフトウェア科学, データ科学, グラフ変換理論, 計算理論 Software Science, Graph Transformation, Theory of Computing
***森下昌紀 ***MORISHITA Masanri	数論的位相幾何学, 素数と結び目, 代数体と3次元多様体 Arithmetic Topology
松江 要 MATSUE Kaname	力学系理論, 数値解析, 精度保証付き数値計算, 微分方程式, 燃焼理論 Dynamical Systems, Numerical Analysis, Rigorous Numerics, Differential Equations, Combustion Theory

*は令和7年3月末日定年退職予定

*: Those who will retire at the end of March, 2025.

**は令和8年3月末日定年退職予定

** : Those who will retire at the end of March, 2026.

***は令和9年3月末日定年退職予定

***: Those who will retire at the end of March, 2027.

※ 基幹教育院

※ Faculty of Arts and Science

【准教授】

(令和6年4月1日の予定スタッフ)

Associate Professors

(As of April 1, 2024)

教員名 Name	研究指導内容 Research Keywords
池 祐一 IKE Yuichi	位相的データ解析, 超局所層理論 Topological data analysis, microlocal sheaf theory
大津幸男 OTSU Yukio	微分幾何学 Differential Geometry
今野拓也 KONNO Takuya	整数論, 保型形式, 表現論 Number Theory, Arithmetic Theory of Automorphic Forms
※斎藤新悟 ※SAITO Shingo	古典的実解析学, 多重ゼータ値, 保険数理 Classical Real Analysis, Multiple Zeta Values, Actuarial Science
坂本祥太 SAKAMOTO Shota	偏微分方程式, 気体分子運動論, Boltzmann方程式 Partial differential equations, Kinetic theory of gases, Boltzmann equation
佐藤康彦 SATO Yasuhiko	作用素環論, 非可換幾何学 Operator Algebras, Non-commutative geometry
田上大助 TAGAMI Daisuke	数値解析, 数値流体力学, 数値電磁気学, 計算機援用設計 Numerical Analysis
竹田雄一郎 TAKEDA Yuichiro	数論的幾何学, 代数幾何学 Algebraic Geometry, Topology
GAINA Daniel	数理論理学, 形式的方法, 圏論, 項書き換えシステム Mathematical logic, Formal methods, Category Theory, Term Rewriting Systems
CESANA Pierluigi	偏微分方程式, 変分法, 弾性理論, 連続体力学 PDEs, Calculus of Variations, Gamma-convergence, Materials Science
佃 康司 TSUKUDA Koji	数理統計学, 離散統計モデル, 回帰分析, 統計的品質管理 Mathematical Statistics, Discrete Statistical Model, Regression Analysis, Statistical Quality Control
葛谷充伸 TSUTAYA Mitsunobu	トポロジー, 代数的位相幾何学, 高次ホモトピー構造 Topology, Algebraic Topology, Higher Homotopy Structure
角田謙吉 TSUNODA Kenkichi	確率論, 相互作用粒子系, 流体力学極限, ランダムトポロジー Probability Theory, Interacting Particle System, Hydrodynamic Limit, Random Topology
手老篤史 TERO Atsushi	数理生物, 数理モデリング, 生物ネットワーク, 脳機能 Mathematical Model
新居俊作 NII Shunsaku	Dynamical System, 微分方程式, 応用解析 Dynamical Systems
◇NGUYEN Dinh Hoa	エネルギーの応用数学, 人工知能, 最適化, 学習と制御 Applied Mathematics for Energy, Artificial Intelligence, Optimization, Learning and Control

教員名 Name	研究指導内容 Research Keywords
樋上和弘 HIKAMI Kazuhiro	数理解物理, 量子トポロジー Mathematical Physics
※BREZINA Jan	偏微分方程式, Euler方程式, Navier-Stokes-Fourier方程式, 数学解析 Partial Differential Equations, Euler Equations, Navier-Stokes-Fourier Equations
森田陽介 MORITA Yosuke	Lie群と等質空間, 微分幾何, ホモトピー論 Lie groups and homogeneous spaces, differential geometry, homotopy theory
吉田寛 YOSHIDA Hiroshi	再生現象の数理解モデル Mathematical Biology on Regeneration
脇隼人 WAKI Hayato	最適化, 連続最適化, 最適化ソフトウェア Continuous Optimization, Optimization Software
Ade Irma Suriajaya	解析的整数論, ゼータ関数及L関数, 素数分布 Analytic Number Theory, Zeta Functions and L-Functions, Distribution of Prime Numbers
吉良知文 KIRA Akifumi	ソーシャル数理解, 動的最適化, 確率最適化, マルコフ決定過程 Social Mathematics, Dynamic Optimization, Markov Decision Process

※ 基幹教育院

※ Faculty of Arts and Science

◇ カーボンニュートラル・エネルギー国際研究所

◇ International Institute for Carbon-Neutral Energy Research (I2CNER)

KYUSHU UNIVERSITY

How to make the Payment for the Application Fee by Credit Card, Union Pay.

24 hours a day, 365 days a year, you can pay anytime! Easy, Convenient and Simple!

You can pay the Application Fee by using Credit Card, Union Pay.



Access

<https://e-shiharai.net/english/>



Online Transaction

1. Top Page

Click "Examination Fee".

2. Terms of Use and Personal Information Management

Please read the Terms of use and Personal Information Management.
Click "Agree" button located in the lower part of this page if you agree with these terms.
Click "Not agree" button located in lower part of this page if you do not agree with these terms.

3. School Selection

Select "Kyushu University (Undergraduate Schools)" or "Kyushu University (Graduate Schools)."

4. School Information

Read the information carefully and click "Next".

5. Category Selection

Choose First to Fourth Selection and add to Basket.

6. Basket Contents

Check the contents and if it is OK, click "Next".

7. Basic Information

Input the applicant's basic information.
Choose your credit card and click "Next".

Paying at Credit Card

Input Credit Card Number (15 or 16-digits), Security Code and Expiration date.

All of your application information is displayed. Check and Click "Confirm".

Click "Print this page" button and print out "Result" page.

Paying at Union Pay

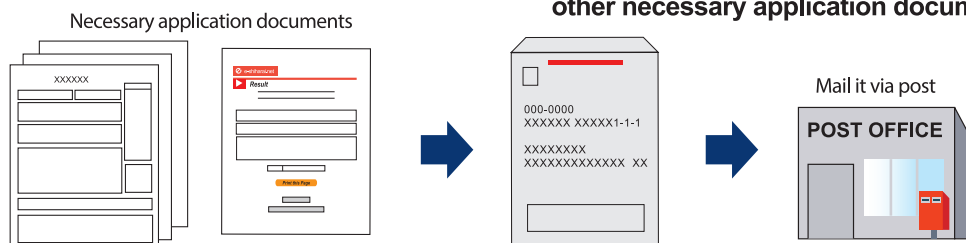
Follow the onscreen instructions to complete the card payment.

Please click the "Application Results" button in the upper part of this site (e-shiharai.net).

Please write down the "Receipt Number" given when you complete your application, and enter your "Payment Method", "Receipt Number" and "Birth Date". Please make sure your printer is ready.

Please print out the "Payment Inquiry - Inquiry result" page.

Enclose the printed "Result" page in an application envelope with other necessary application documents.



[NOTICE/FAQ]

- You can make a payment anytime, during the payment period mentioned in the application instructions. Please refer to the application instructions and complete payment in time.
- Please complete payment by 11:00 pm Japan time, on the last date of the payment period.
- Please note that refund is not possible once you have made a payment of Application fee.

- A fee is added to Examination fee. For further info, please visit our website.
- It is possible to use a card which carries a name different from that of the applicant. However, please make sure that the information on the basic information page is that of the applicant him/herself.
- If you did not print out "Result" page, you can check it later on Application Result page. Please enter "Receipt Number" and "Birth Date" to redisplay.
- Please directly contact the credit card company if your card is not accepted.

For questions or problems not mentioned here, please contact:

E-Service Support Center Tel : +81-3-5952-9052 (24 hours everyday)

Application Form
Kyushu University International Programs in Mathematics
Admission in Autumn 2024(for CSC applicants)

Application ID Number: (Leave this space blank. The space will be filled out by the University.)				<p>Photograph</p> <p>Attach your photograph (waist up, head uncovered and front view) here. Write your name and nationality in block letters on the back of the photo.</p> <p>5.5cm × 4.5cm</p>
1. Name in Alphabet	Family Name	First Name	Middle Name	
2. Name in Kanji (if any)				
3. Name in Katakana (if you know)				
4. Date of Birth (YYYY/MM/DD)				
5. Sex (Male:1 / Female: 2)				
6. Marital Status				
7. Nationality				
8. Present Status (with the name of the university attended or employer)				
9. Residence Status in Japan^{#1}				
10. First Language				
11. Contact Information	Address			
	TEL^{#2}			
	FAX^{#2}			
	E-mail (required)			

12. Parental Contact Information	Name	
	Relationship to the Applicant	
	Address	
	TEL^{#2}	
	FAX^{#2}	
	E-mail	
13. Score Reports of English Proficiency Tests	Examination^{#3}	
	Date Taken	
	Score	
14. Research Topics		
15. Title of (Bachelor's or Master's) Thesis		
16. Name of Planned Supervisor		
17. Advance notice to planned Supervisor^{#4}		

#1: If you do not have a residence status in Japan, write "No Residence Status" in the space.

#2: Include the country code before the phone number and fax number.

#3: Write the name of the standardized English proficiency test that you have taken, such as TOEFL (Test of English as a Foreign Language), IELTS (International English Language Testing System, Academic Module) or Cambridge ESOL Examinations (FCE, CAE or CPE), together with the category if any.

#4: Be sure to contact your planned supervisor in advance and fill "○" in the right column.

Name in Alphabet	
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Curriculum Vitae: Educational Background

(Describe your complete educational background from elementary to your most recent educational level.)

Category	School Name	Location (City/Country)	Period of Schooling/ Requisite year of schooling	Period of Attendance (YYYY/MM – YYYY/MM)
Elementary Education				
Secondary Education (Junior High School)				
Senior Secondary Education (High School)				
University (undergraduate level)				
University (graduate level) and/or other				

Name in Alphabet	
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Curriculum Vitae: Employment Record (if any)

Name of organization	Location	Period of employment (YYYY/MM – YYYY/MM)	Position	Type of work

Form for submission of the certificate of payment of application fee

Examinee No.	※	Name	
<p>(1) If you pay the application fee at a convenience store, paste the certificate of the payment in this form and submit with other application documents.</p> <p>(2) If you pay the application fee by Credit Card, Union Pay or Alipay, submit the printed “Result” page with other application documents. You don’t need to submit this form.</p>			

Leave the “※” column blank.