Additional Data
for
the External Review Committee

1. Graduate program: For the most recent available 10 years:
   1-1. The number of graduate students admitted each year.
   1-2. The number of students who graduate each year.
   1-3. The number of years for completion of M.Sc and D.Sc degrees.
   1-4. What courses were offered in the last three years?
   1-5. What are the percentages of women in the M.Sc. and D.Sc programs?
   1-6. What is the percentage of women D.Sc./Ph.D. recipients among all mathematics D.Sc./Ph.D. recipients in Japan?

2. Workshops:
   2-1. How many women were participants in the workshops of the last two years? How many were organizers?
   2-2. From what countries did the participants/organizers of workshops come? How many people came from each?

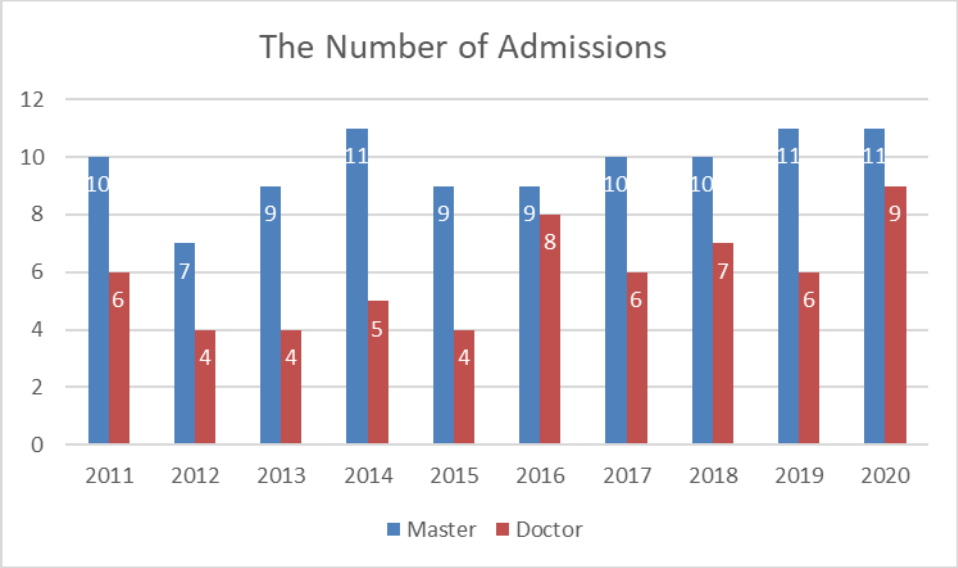
3. Faculty:
   3-1. What were the placements of recent postdocs and non-promoted assistant professors?
   3-2. How long have each of the Associate Professors been in that rank?
   3-3. Hire year and retirement year of the faculty: a list of the faculty, with fields, year of hire and year of mandatory retirement.
   3-4. Is there a strategic plan for hiring in different fields?

4. Has the Institute made significant changes in the last two years?

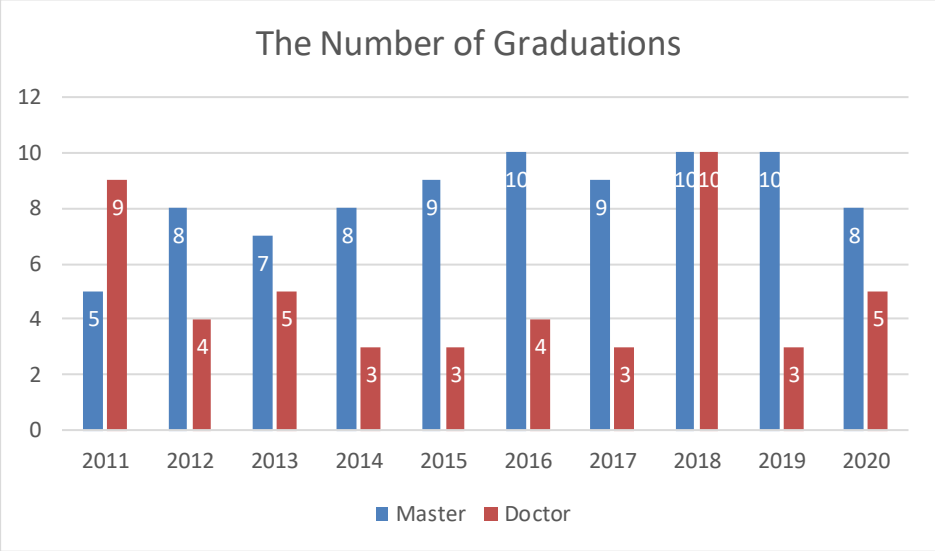
1. Graduate program:
For the most recent available 10 years:

1-1. The number of graduate students admitted each year.

The student quota is 10 for both the Doctoral course and the Master's course. Students in the Master's course are selected from 30 to 50 applicants, and 6 to 7 M.Sc graduates go on to the Doctoral course on average.

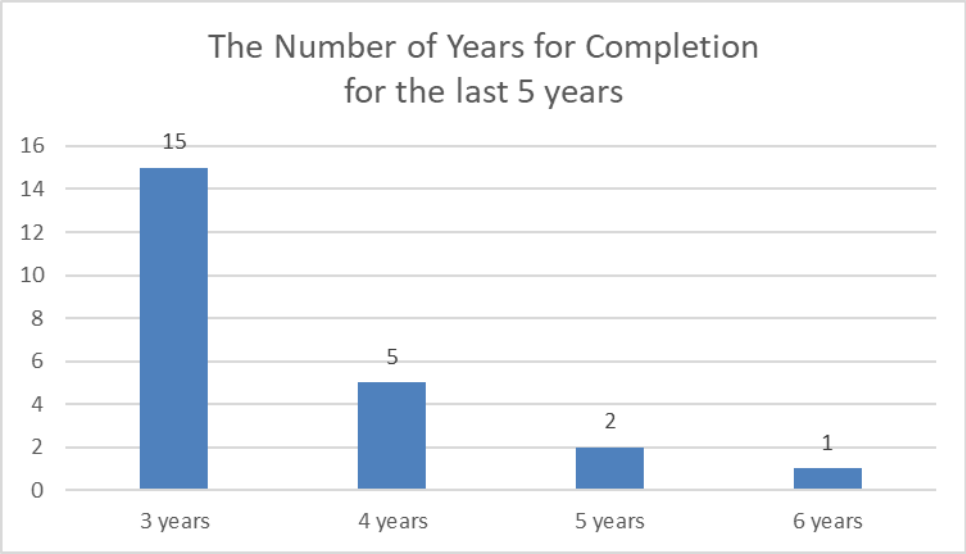


1-2. The number of students who graduate each year.



1-3. The number of years for completion of M.Sc and D.Sc degrees.

The standard period of completion is two years for the Master's course and three years for the Doctoral course, respectively. Most students complete the Master's course in the prescribed two years. The situation for the Doctoral course is as follows:



1-4. What courses were offered in the last three years?

The table below shows lecture courses offered this year. RIMS offers these courses together with the Department of Mathematics, and most courses in the table have been provided for the last three years.

Course Title for Master Course

Actuarial Mathematics A, B
Computer Science A
Exercises in Actuarial Mathematics A, B
Graduate Lecture in Advanced Functional Analysis
Graduate Lecture in Algebraic Geometry
Graduate Lecture in Differential Geometry
Graduate Lecture in Functional Analysis
Graduate Lecture in Mathematical Sciences
Graduate Lecture in Number Theory
Graduate Lecture in Nonlinear Analysis
Graduate Lecture in Probability Theory

Graduate Lecture in Partial Differential Equations
Graduate Lecture in Pension Plan Design
Graduate Lecture in Topology
How to write Mathematical Papers
Practical Introduction to Mathematical Software
Special Lectures (Differential Geometry II)
Special Lectures (Differential Geometry III)
Special Lectures (Introduction to Mathematical Finance)
Special Lectures (Iwasawa Theory)
Special Lectures (Partial Differential Equations)
Special Lectures (Theory of Representations)
Special Lectures (Topology)
Special Lecture I
Special Lectures (Algebraic Geometry)
Special Lectures (Applied Mathematics I)
Special Lectures (Applied Mathematics II)
Special Lectures (Complex Geometry)
Special Lectures (Differential Geometry I)
Special Lectures (Probability Theory)
Topics in Algebra B
Topics in Analysis A, B, F
Topics in Geometry A, B
Top Global Course Basic Lectures 1
Top Global Course Special Lectures 1-7

*The presence of letters and numbers after course names indicate that the courses in question are conducted throughout multiple semesters. Courses without letters or numbers are offered for a single semester or as an intensive lecture course for several days.

Below is a list of seminars that RIMS and the Dept. of Math. offer. ＊ indicates courses offered by faculty members of RIMS.

Seminar on Algebra a-d	
Seminar on Algebraic Geometry a-d	
Seminar on Algebraic Differential Geometry a-d	＊
Seminar on Algebraic Geometry and Related Topics a-d	＊
Seminar on Algebraic Varieties a-d	＊
Seminar on Algorithm Theory a-d	＊
Seminar on Analysis a-d	

Seminar on Arithmetic Geometry a-d	*
Seminar on Complex Analysis a-d	
Seminar on Continuum Mechanics a-d	*
Seminar on Differential Equations a-d	
Seminar on Differential Geometry a-d	
Seminar on Discrete Optimization a-d	*
Seminar on Dynamical Systems a-d	
Seminar on Functional Analysis a-d	
Seminar on Fluid Physics A-D	
Seminar on Geometry a-d	
Seminar on Geometry and Related Topics a-d	*
Seminar on Insurance a-d	
Seminar on Logic in Computer Science a-d	*
Seminar on Mathematical Fluid Mechanics a-d	*
Seminar on Mathematical Physics a-d	
Seminar on Nonlinear Dynamics a-d	*
Seminar on Number Theory a-d	
Seminar on Number Theory and Related Fields a-d	*
Seminar on Operator Algebras a-d	*
Seminar on Partial Differential Equations a-d	*
Seminar on Probability Theory a-d	*
Seminar on Quantum Field Theory a-d	*
Seminar on Representation Theory a-d	
Seminar on Representation Theory and Vertex Algebras a-d	*
Seminar on Topology a-d	
Seminar on Theory of Computation a-d	*
Seminar on Topology a-d	*

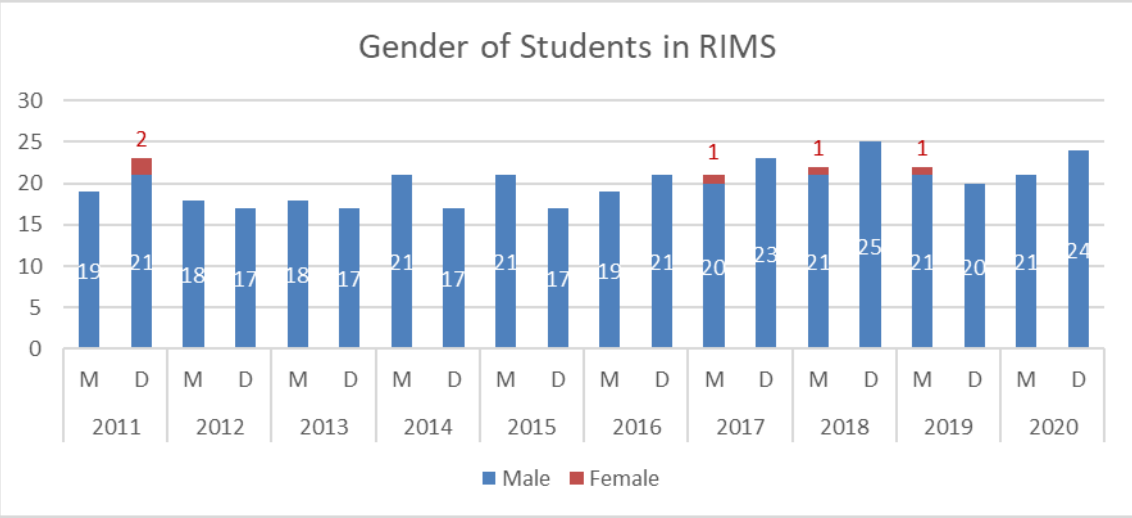
RIMS also provides the following undergraduate courses in Kyoto University.

Course Title for Undergrad. Course offered by RIMS faculty members

Invitation to Modern Mathematics and Mathematical Sciences - Basic concepts and their role in various sciences
Fundamentals of Computer Science
Quest for Mathematics II-E2 (I & II semesters)
Mathematical Statistics-E2 (I & II semesters)
Second Course in Statistics-E2

1-5. What are the percentages of women in the M.Sc. and D.Sc programs?

The percentages of women in RIMS are very low. As described below, there are few female students in the Graduate School of Science in Kyoto Univ. and most of them major in fields other than mathematics.



Gender of Students in the Graduate School of Science, Kyoto U.

Year	Master			Doctor		
	Male	Female	Female Ratio	Male	Female	Female Ratio
2015	522	80	13.3 %	417	83	16.6 %
2016	545	86	13.6 %	413	71	14.7 %
2017	554	98	15.0 %	414	67	13.9 %
2018	572	93	14.0 %	414	70	14.5 %
2019	566	99	14.9 %	405	75	15.6 %

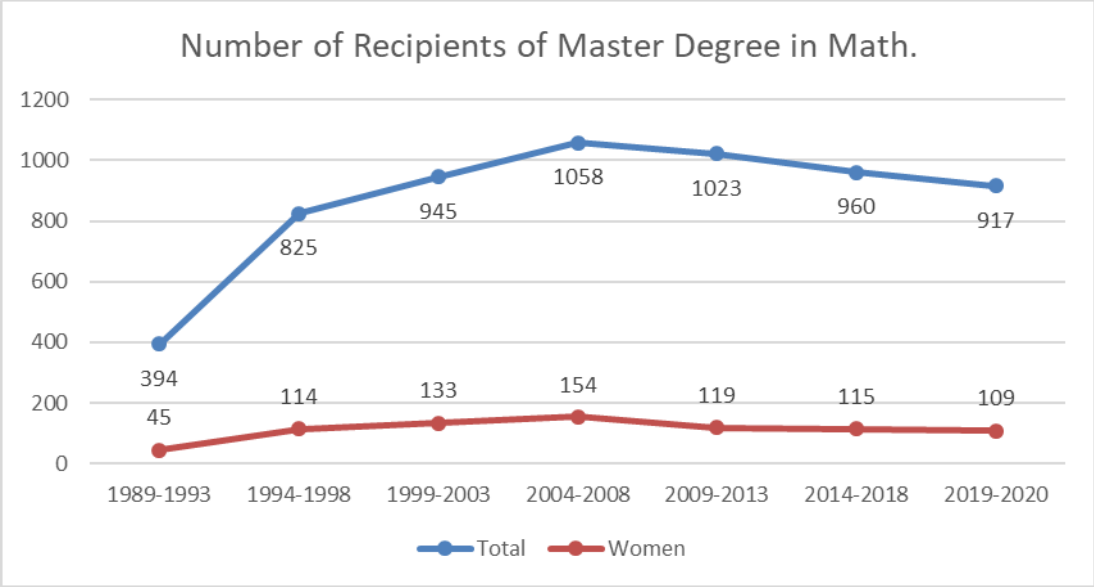
Gender of Newly Enrolled Students in Sci., Kyoto U., 2020

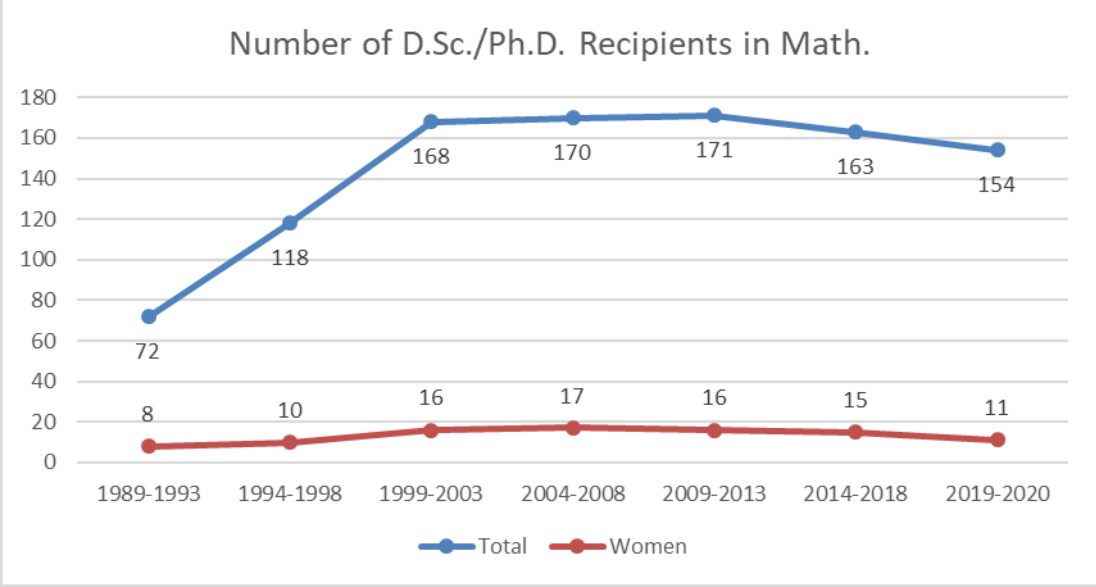
Major	Master			Doctor		
	Male	Female	Female Ratio	Male	Female	Female Ratio
Math. & Math. Sci.	52	2	3.7 %	12	0	0 %
Phys. & Astron.	81	3	3.6 %	40	2	4.8 %
Planetary Sci.	32	7	17.9 %	12	1	7.7 %
Chemistry	50	8	13.8 %	18	3	14.3 %
Bio. Sci.	40	22	35.5 %	16	13	44.8 %
Total	255	42	14.1 %	98	19	16.2 %

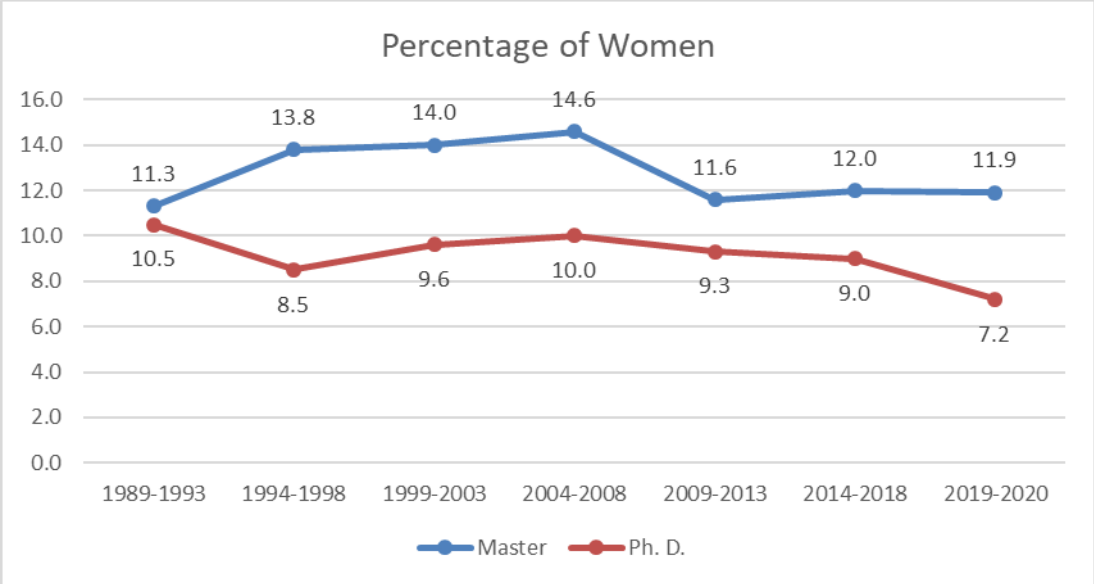
1-6. What is the percentage of women D.Sc./Ph.D. recipients among all mathematics D.Sc./Ph.D. recipients in Japan?

Gender equality is a problem in Japanese mathematics as a whole. The tables below are made with reference to pp. 4 of the following material, which is a detailed summary of the current situation of gender equality in Mathematics in Japan.

http://www.math.keio.ac.jp/~bannai/Report_MathGender_en.pdf







REF) Percentage of Female students in Mathematics 2020

	U. of Tokyo	Osaka U.	Nagoya U.
Master	3.3 %	4.9 %	8.2 %
Doctor	2.7 %	3.3 %	3.6 %

2. Workshops:

2-1. How many women were participants in the workshops of the last two years? How many were organizers?

Female Participants and Organizers

Year	Number of Participants	Female Participants	Female Organizers
2018	3,874	259	5
2019	4,103	275	3
2020	2,143	158	1

*All workshops were held online in 2020.

2-2. From what countries did the participants/organizers of workshops come? How many people came from each?

Organizers from overseas institutes were/are:

2018: Simon Wood (UK), Steven J. Greybush (USA)

2019: Kenji Matsuki (USA), Letitia Giraldi（France）*Female

2020: Khoussainov Bakh (New Zeeland), Pedit Franz (USA), Cheng Siu-Wing (Hong Kong), Tobias Steven (UK), Fesenko Ivan（Russia）

*All of the 2020 projects will be conducted in 2021 due to COVID-19.

Participants from overseas

2018	
USA	58
Germany	47
Korea	40
China	34
France	32
Taiwan	26
UK	15
Italy	12
Canada	9
Brazil	8
Others	79

2019	
USA	93
Korea	57
China	48
Hungary	43
France	37
UK	29
Germany	19
Canada	16
Austria	13
Australia	12
Others	96

2020	
USA	36
Philippines	26
China	18
Mexico	14
Austria	12
Columbia	10
Canada	7
Taiwan	7
Singapore	6
Thailand	5
Others	46

3. Faculty:

3-1. What were the placements of recent postdocs and non-promoted assistant professors?

RIMS employs various types of postdocs. The information described below is for RIMS Research Fellows, called publicly regardless of the research areas of applicants.

- Postdocs (RIMS Research Fellow)

2018 (1): Functional analysis
2019 (3): Arithmetic geometry / Representation theory / Category theory
2020 (1): Geometry and topology

- Non-promoted Assistant Professors

2018 (1): Theoretical computer science
2019 (3): Topology / Differential geometry / Differential geometry and theory of operator algebras
2020 (1): Arithmetic geometry

3-2. How long have each of the Associate Professors been in that rank?

Please refer to the table in Subsection 3-3.

3-3. Hire year and retirement year of the faculty: a list of the faculty, with fields, year of hire and year of mandatory retirement.

The retirement age for professors, associate professors and lecturers is 65 years. The tenure of assistant professors is 7 years and, in the case of recent recruitments, can be extended 3 more years. The tenure of program-specific posts depends on the duration of the project to which they are associated.

Professor

Name	Research Area	Hired on	Promoted on	Will Retire on	Tenure of Assoc. Prof.
ONO, Kaoru	Differential Geometry, Topology	2012		2027	
NAMIKAWA, Yoshinori	Algebraic Geometry	2020		2029	
OHTSUKI, Tomotada	Topology	2003		2031	
KUMAGAI, Takashi	Probability	2001		2032	
TAMAGAWA, Akio	Number Theory, Arithmetic Geometry	1992	1996 2002	2033	6 years
MOCHIZUKI, Shinichi	Arithmetic Geometry	1992	1996 2002	2034	6 years
ARAKAWA, Tomoyuki	Representation Theory	2010	2018	2034	8 years
HASEGAWA, Masahito	Theoretical Computer Science	1997	2003 2006	2035	3 years
MAKINO, Kazuhisa	Discrete Mathematics, Optimization and Theory of Algorithms	2016	2017	2035	1 year
MOCHIZUKI, Takuro	Differential Geometry, Algebraic Geometry	2008	2012	2038	4 years
NAKANISHI, Kenji	Nonlinear PDE	2018		2039	
OZAWA, Narutaka	Operator Algebra, Analytic Group Theory	2011	2012	2040	1 year

Associate Professor

Name	Research Area	Hired on	Promoted on	Will Retire on	Tenure of Assoc. Prof.
KAWAI, Toshiya	Quantum Field Theory, Mathematical Physics	1997		2026	23 years
NAKAYAMA, Noboru	Algebraic Geometry	1995		2028	25 years
TAKEHIRO, Shin-ichi	Geophysical Fluid Dynamics	2003		2030	17 years
TERUI, Kazushige	Mathematical Logic	2008		2037	12 years
KAWAKITA, Masayuki	Algebraic Geometry	2004		2042	16 years
CROYDON, David	Probability Theory	2019		2047	2 years
HOSHI, Yuichiro	Arithmetic Geometry	2007	2011	2048	9 years
KAWAMURA, Akitoshi	Theory of computation	2020		2048	1 year
KOBAYASHI, Yusuke	Optimization Theory	2018		2049	2 years
ISHIMOTO, Kenta	Fluid mechanics	2019		2053	1 year

Lecturer

Name	Research Area	Hired on	Promoted on	Will Retire on
YAMASHITA, Go	Arithmetic Geometry	2015		2043
TAN, Fucheng	Arithmetic Geometry and Galois Representations	2016	2017	2046
KISHIMOTO, Nobu	Nonlinear PDE	2013		2049

Assistant Professor

Name	Research Area	Hired on	Will Retire on
HELMKE, Stefan	Algebraic Geometry	1997	2031
OOURA, Takuya	Numerical Analysis	2000	2034
HIKITA, Tatsuyuki	Geometric Representation Theory	2016	2023
KOSHIKAWA, Teruhisa	Number Theory, Arithmetic Geometry	2016	2023
MUROYA, Koko	Theoretical computer science	2018	2025
ISHIKAWA, Katsumi	Topology	2019	2026
ISHIKAWA, Suguru	Differential geometry	2019	2026
TSUJIMURA, Shota	Arithmetic geometry	2020	2027
YAMASHITA, Mayuko	Differential geometry and theory of operator algebras	2019	2026

Program Specific Assistant Professor

Name	Research Area	Hired on	Will Retire on
YANG, Yu	Arithmetic geometry	2019	2026
ISONO, Yusuke	Theory of operator algebras	2016	2021

3-4. Is there a strategic plan for hiring in different fields?

At RIMS, decisions concerning the hiring of faculty members are in practice made at professors' meetings. Each professor carefully checks activities in their area and related areas globally and, when there is a vacancy/new position at RIMS, reports the present situation. While there is currently no strategic plan for hiring in different fields, there is an unwritten agreement that professors must be very careful about the areas from which to hire. In particular, whenever a new professor is being recruited, the first thing that is discussed in professors' meetings is from which field to hire, and it could often happen that the field of the new professor is different from that of the previous one.

4. Has the Institute made significant changes in the last two years?

As mentioned in the Self-Evaluation Report (December 2020), the following two points can be listed as significant changes in recent years.

1. Certification as an International Joint Usage / Research Center in November 2018.
   *Details are described in the Section 5 of Self-Evaluation Report (December 2020).

2. The establishment of the Next Generation Geometry Research Center in April 2019.
   *Details are described in the Section 7-2 of Self-Evaluation Report (December 2020).