

# Swiss Doctoral Program in Mathematics

*Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel*

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## Annual Report Academic Year 2007/08

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This report contains information on the **Swiss Doctoral Program in Mathematics**. It covers the period of the academic year 2007/08, with a preview of the following academic year. To benefit from the hyperlinks, please use the online version on **[www.math.ch/dp](http://www.math.ch/dp)**.

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# **Swiss Doctoral Program in Mathematics**

*Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel*

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## **Welcome**

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Under the label **Swiss Doctoral Program in Mathematics** the departments and institutes of mathematics at the Universities of [Basel](#), [Bern](#), [Fribourg](#), [Geneva](#) and [Neuchâtel](#) offer a joint program for doctoral students in mathematics. The program is open to all doctoral students at the mentioned universities and aims to provide a comprehensive spectrum of research and training activities.

By completing the *Swiss Doctoral Program in Mathematics* doctoral students will be provided, in addition to the doctoral degree from the participating university, with a **certificate** of the *Doctoral Program*.

The graduate students are attached to the universities where they are enrolled. In particular, master's and doctoral degrees are issued by the participating universities and are outside the competence of the *Doctoral Program*.

The *Swiss Doctoral Program in Mathematics* consists of participating faculty, graduate students enrolled in the *Doctoral Program*, and post-docs. Participation is voluntary. The *Doctoral Program* permits doctoral students to validate their engagement, which is not possible without the framework of this program.

In a pilot phase till 2008, the *Swiss Doctoral Program in Mathematics* runs together with the pre-existing [Ecole doctorale de mathématiques Genève - Neuchâtel](#).

# Swiss Doctoral Program in Mathematics

*Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel*

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## Objectives

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The aim of the *Swiss Doctoral Program in Mathematics* is to offer an advanced research training in mathematics of high quality and to prepare doctoral students for their future career.

The *Doctoral Program* provides a broad platform for contacts among the mathematical research groups in Switzerland. The synergistic effect initiated by the joint activities represents a major added value complementing the research activities of the participating universities.

The *Swiss Doctoral Program in Mathematics* covers the three following parts:

**Education towards research:** In a joint effort of the participating research groups at the departments of mathematics at the involved universities the *Doctoral Program* offers an intensive and broad graduate education in mathematics of international format. The program consists of a wide range of graduate courses and research seminars and is complemented by the program of the *Troisième Cycle Romand de Mathématiques*. Moreover, special programs are launched that include block-courses given by internationally recognized speakers, and sequences of lectures focusing on recent developments. The program comprises both, activities that provide a good general mathematical background and specialized topics which are related to the research interests of groups of doctoral students. The learning outcome of the doctoral program is the ability to do independent original research in mathematics.

**Information:** The *Doctoral Program* offers a platform of information about research activities, conferences, the mathematical community, and exchange programs. It also provides information about job opportunities and continuing education.

**Career management:** The *Doctoral Program* addresses the issue of the professional integration of doctoral students. It serves as a platform to establish contacts with doctoral students of other research groups in Switzerland and offers a challenging and stimulating atmosphere so as to provide young researchers with an excellent base for a professional or research career in mathematics.

**Support:** The *Doctoral Program* grants travel support to doctoral students who participate (actively) in conferences or other scientific activities abroad. Requests are to be submitted to one of the [directors](#), with a recommendation of the PhD advisor and the local [committee member](#).

# **Swiss Doctoral Program in Mathematics**

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## **Neighboring Schools**

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The *Swiss Doctoral Program in Mathematics* collaborates with

- [The Zurich Graduate School in Mathematics](#)
- [Ecole doctorale de l'EPFL](#)
- [Le 3e Cycle romand de Mathématiques](#)
- [The Graduate Program in mathematics of Bern and Fribourg](#)

### **Reciprocity agreement between the Zurich Graduate School in Mathematics and the Swiss Doctoral Program in Mathematics:**

PhD Students which are enrolled in either school are entitled to participate in activities of the other school. A request for reimbursement of travel or other costs can only be filed with the own school according to its rules.

A similar agreement with the *Ecole doctorale de l'EPFL* is currently under negotiation.

# Swiss Doctoral Program in Mathematics

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## Spectrum of Activities

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The *Doctoral Program*

- offers courses in all areas of mathematics at graduate and research level,
- organizes workshops and block-courses in which experts present advanced topics and work with the doctoral students,
- organizes workshops and seminars where the doctoral students present in an accessible way the context and the progress of their own research in a talk or by a poster,
- encourages doctoral students to participate actively in international conferences,
- proposes complementary training in scientific English, computer science, scientific writing and presentation technique,
- prepares and stimulates the transition of the doctoral students to the professional life in industry, administration or in academia,
- sets up a network of information relevant to doctoral students for succeeding in their thesis and in their career planning.

Activities of the *Doctoral Program* include the following events primarily targeted at the graduate student audience:

- **Graduate courses:** in general, these are special courses at the graduate level given over the period of one semester, or more concentrated courses having around 20 teaching hours. Graduate courses have a flexible format: they can be given by one or several teachers, and they can be offered once a week or they can be organized in intensive modules dispatched over one-week periods.
- **Summer/Winter Programs:** these are one-week events which bring together graduate students and leading experts in their respective fields. Typically, the invited speakers present several mini-courses, and there is a possibility for informal discussions with graduate students.
- **Graduate Colloquium:** this is an opportunity for graduate students to present their own work in front of a friendly audience. Such events can be organized in particular topics, as well as at the interdisciplinary level (between different fields of mathematics).
- **Other Events** can be organized at the request of the members of the *Doctoral Program*, if the committee finds them suitable.

Every year, the *Doctoral Program* organizes a [list of events](#) where doctoral students are encouraged to participate and to [earn credits](#). Each event is assigned a certain number of credits depending on its length and content.

Below we list more particular targets of the *Doctoral Program* which are not currently covered by the *3e Cycle Romand*:

- To offer a choice of advanced graduate courses in various fields of mathematics (similar to American graduate schools). These courses will be addressed to graduate students in the beginning of their studies. The main purpose is to provide an up to date background in the major fields of mathematics to the graduate students participating in the *Doctoral Program*.
- To organize two-day meetings within the Graduate Colloquium. These meetings will give an opportunity to doctoral students to present their research area to other doctoral students and their results to experts in the respective fields.
- To organize Summer/Winter Schools in case the offer of such schools is not sufficient. The topic can vary and it will be chosen according to the research topics of graduate students participating in the *Doctoral Program*.

On a smaller scale, the *Doctoral Program* addresses the issues of marketing of scientific research and of the professional integration of doctoral students. In particular, the following issues should be touched upon in the format of lectures or workshops:

- How to write articles in mathematics (what is an introduction, how to compose the bibliography etc.)?
- How to make a presentation (in particular, in English)?
- How to use a computer in mathematical research?
- How to write a CV, and how to prepare a job interview?

# Swiss Doctoral Program in Mathematics

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## Responsibilities of the Committee

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The activities of the *Doctoral Program* are planned and directed by the *Doctoral Program Committee* composed of **two faculty members** and **one graduate student (and a substitute)** from **each university participating** in the *Doctoral Program*. The Director of the *3e Cycle Romand de Mathématiques* is a permanent invitee in the *Committee*. The responsibilities of the *Committee* are as follows:

- To plan activities of the *Doctoral Program* and to coordinate the activities with other graduate schools. The program of activities is prepared and announced for each academic year.
- To distribute the budget of the *Doctoral Program* between different activities.
- To approve applications of graduate students for entering the *Doctoral Program* and for participation in various activities.
- To assign credits to graduate students for successful participation in the activities of the *Doctoral Program* or in other activities in mathematics at the graduate level.

Faculty members of participating institutions are entitled and invited to [submit proposals](#) to the *Doctoral Program Committee*.

The *Committee* nominates the **Director(s)** of the *Doctoral Program*. The *Director* is a faculty member at one of the participating universities. The *Committee* can delegate part of its responsibilities to the *Director* who runs the activities of the *Doctoral Program* in the periods between the meetings of the *Committee*.



# Swiss Doctoral Program in Mathematics

*Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel*

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## Directors

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### Bruno Colbois

Institut de Mathématiques  
Université de Neuchâtel  
Rue Emile Argand 11  
Case postale 158  
CH-2009 Neuchâtel (Switzerland)  
Phone ++41 (0)32 718 28 08  
Fax ++41 (0)32 718 28 01  
e-mail [Bruno.Colbois@unine.ch](mailto:Bruno.Colbois@unine.ch)



### Norbert Hungerbühler

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University of Fribourg  
Chemin du Musée 23  
CH-1700 Fribourg (Switzerland)  
Phone ++41 (0)26 300 91 82  
Fax ++41 (0)26 300 97 44  
e-mail [norbert.hungerbuehler@unifr.ch](mailto:norbert.hungerbuehler@unifr.ch)



# Swiss Doctoral Program in Mathematics

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## Senior Committee Members

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University	Committee Member	e-mail
Basel	Hanspeter Kraft	<a href="mailto:Hanspeter.Kraft@unibas.ch">Hanspeter.Kraft@unibas.ch</a>
Bern	<a href="#">Zoltan Balogh</a>	<a href="mailto:zoltan.balogh@math.unibe.ch">zoltan.balogh@math.unibe.ch</a>
	<a href="#">Frank Kutzschebauch</a>	<a href="mailto:frank.kutzschebauch@math.unibe.ch">frank.kutzschebauch@math.unibe.ch</a>
Fribourg	<a href="#">Norbert Hungerbühler*</a> ,**	<a href="mailto:norbert.hungerbuehler@unifr.ch">norbert.hungerbuehler@unifr.ch</a>
	<a href="#">Ruth Kellerhals</a>	<a href="mailto:ruth.kellerhals@unifr.ch">ruth.kellerhals@unifr.ch</a>
Geneva	<a href="#">Anton Alekseev</a>	<a href="mailto:Alekseev@math.unige.ch">Alekseev@math.unige.ch</a>
	<a href="#">Nicolas Monod</a>	<a href="mailto:Nicolas.Monod@math.unige.ch">Nicolas.Monod@math.unige.ch</a>
Neuchâtel	<a href="#">Bruno Colbois*</a>	<a href="mailto:Bruno.Colbois@unine.ch">Bruno.Colbois@unine.ch</a>
	<a href="#">Alain Valette</a>	<a href="mailto:alain.valette@unine.ch">alain.valette@unine.ch</a>

\* Directors of the *Doctoral Program*

\*\* President of the *3e Cycle Romand de Mathématiques* (permanent invitee)

# Swiss Doctoral Program in Mathematics

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## Junior Committee Members

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University	Committee Member	e-mail
Basel	<a href="#">Jonas Budmiger</a>	<a href="mailto:Jonas.Budmiger@stud.unibas.ch">Jonas.Budmiger@stud.unibas.ch</a>
Bern	<a href="#">Stephane Materna</a>	<a href="mailto:stephane.materna@math.unibe.ch">stephane.materna@math.unibe.ch</a>
Fribourg	<a href="#">Geneviève Perren</a>	<a href="mailto:genevieve.perren@unifr.ch">genevieve.perren@unifr.ch</a>
Geneva	<a href="#">Shaula Fiorelli</a>	<a href="mailto:Shaula.Fiorelli@math.unige.ch">Shaula.Fiorelli@math.unige.ch</a>
	<a href="#">Rudolf Rohr</a>	<a href="mailto:Rudolf.Rohr@math.unige.ch">Rudolf.Rohr@math.unige.ch</a>
Neuchâtel	<a href="#">Kolawolé Atchade</a>	<a href="mailto:kolawole.atchade@unine.ch">kolawole.atchade@unine.ch</a>
	<a href="#">Grégory Roth</a>	<a href="mailto:gregory.roth@unine.ch">gregory.roth@unine.ch</a>

# **Swiss Doctoral Program in Mathematics**

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## **Enrollment: General**

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The participation in the *Doctoral Program* is voluntary for both, faculty and doctoral students. However it is recommended. All doctoral students of the participating universities and all faculty members and post-docs have access to the activities of the *Doctoral Program* and are invited to participate actively. Enrolled doctoral students are entitled to [apply for refund of costs](#) for the successful participation in activities of the *Doctoral Program*.

Enrollment of a doctoral student in the *Doctoral Program* ends with the conferral of the doctorate and is limited to five years. Participating doctoral students are usually employed as assistants at one of the affiliated universities or hold a scholarship of the National Science Foundation or of other sources.

# Swiss Doctoral Program in Mathematics

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## Application of Students

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A PhD student in mathematics at one of the affiliated universities can enroll for the *Doctoral Program* by filling the following form. A confirmation is sent by e-mail to the applicant and his or her thesis advisor.

<input type="text"/>	Name *
<input type="text"/>	First name *
<input type="text"/>	University *
<input type="text"/>	E-Mail *
<input type="text"/>	Homepage
<input type="text"/>	Thesis advisor
*	
<input type="text"/>	E-Mail of
thesis advisor *	
<input type="submit" value="Submit"/>	

\* = required fields

# Swiss Doctoral Program in Mathematics

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## Registration research groups

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Professors and lecturers of the affiliated universities can register with the *Swiss Doctoral Program in Mathematics*. By doing so, your name, research group and area will be listed on the [member's page](#) of the *Doctoral Program*. This promotes your research and makes your group attractive for young PhD students, and you express your support to the *Doctoral Program*. A confirmation of your registration is sent by e-mail.

<input type="text"/>	Name *
<input type="text"/>	First name *
<input type="text"/>	University *
<input type="text"/>	E-Mail *
<input type="text"/>	Homepage
<input type="text"/>	Research
field(s) *	
<input type="submit" value="Submit"/>	

\* = required fields

# Swiss Doctoral Program in Mathematics

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## Scoring

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The participation of a doctoral student in the *Doctoral Program* is validated by ECTS points. A doctoral student must acquire a minimum of **30 ECTS points** to be entitled to receive the certificate of the *Doctoral Program*. A doctoral student can earn credit points as follows:

1. By following and validating a course which is approved by the *Doctoral Program* (3 ECTS points)
2. By participating and validating a workshop, block-course or conference approved by the *Doctoral Program* (3 ECTS points)
3. By presenting the context and the progress of the own research within the framework of a colloquium (3 ECTS points)
4. By presenting a scientific topic different from the own research within the framework of a colloquium (3 ECTS points)
5. By participating in a complementary training in scientific English, computer science, scientific writing or presentation technique, or by organizing a scientific activity within the framework of the *Doctoral Program* (1 ECTS = 25 hours of work)
6. For a doctoral student working as an assistant, a maximum of 6 ECTS points can be obtained by fulfilling his teaching obligations. This maximum corresponds to the teaching load of a half-time assistant during four years.

A minimum of 9 ECTS points must be acquired in the first category, and at least 6 ECTS points in each of the categories 2 and 3.

Each doctoral student is guided by an advisor, usually a professor of one of the affiliated universities. Of course, *thèses en co-tutelle* and co-direction of a thesis is possible. The doctoral student develops a research activity and is supposed to obtain results that lead to the granting of a doctorate at the respective university.

# Swiss Doctoral Program in Mathematics

*Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel*

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## Validation

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Doctoral students who are registered with the *Swiss Doctoral Program in Mathematics* can validate an activity by sending the validation form to

*Norbert Hungerbühler  
Department of Mathematics  
University of Fribourg, Pérolles  
Chemin du musée 23  
CH-1700 Fribourg*

Download the [validation form](#).

To earn the credits one needs to satisfy certain criteria, e.g. to pass a test/exam for graduate courses, to give a talk at the Graduate Colloquium, or to take an active part in a Summer/Winter School etc. The *Doctoral Program* accepts credits earned in the activities organized by the [Le 3e Cycle romand de Mathématiques](#) and by [other graduate schools in mathematics](#).

Upon reception and verification of the form, the ECTS points associated with the activity are credited to the student's account.

Please attach the [reimbursement form](#) in case you apply for refund of costs. And please keep a copy of the form with your records.



# Swiss Doctoral Program in Mathematics

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## Validation Form

I have participated in the following activity of the *Doctoral Program*:

Title: .....

.....

Date: .....

My name: .....

Course instructor: .....

I would like to credit the ECTS points associated with this activity for the following category (see below for the list of categories).

1

2

3

4

5

6

## Signatures

PhD student: .....

Course instructor: .....

Thesis advisor: .....

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**Scoring rules:** The participation of a doctoral student in the *Doctoral Program* is validated by ECTS points. A doctoral student must acquire a minimum of 30 ECTS points to be entitled to receive the certificate of the *Doctoral Program*. A doctoral student can earn credit points as follows:

1. By following and validating a course which is approved by the *Doctoral Program* (3 ECTS points).
2. By participating and validating a workshop, block-course or conference approved by the *Doctoral Program* (3 ECTS points),
3. By presenting the context and the progress of the own research within the framework of a colloquium (3 ECTS points).
4. By presenting a scientific topic different from the own research within the framework of a colloquium (3 ECTS points).
5. By participating in a complementary training in scientific English, computer science, scientific writing or presentation technique, or by organizing a scientific activity within the framework of the *Doctoral Program* (1 ECTS point = 25 hours of work).
6. For a doctoral student working as an assistant, a maximum of 6 ECTS points can be obtained by fulfilling his or her teaching obligations. This maximum corresponds to the teaching load of a half-time assistant during four years.

A minimum of 9 ECTS points must be acquired in the first category, and at least 6 ECTS points in each of the categories 2 and 3.

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Please send this form to:

Norbert Hungerbühler, Department of Mathematics, University of Fribourg, Pérolles, CH-1700 Fribourg

# **Swiss Doctoral Program in Mathematics**

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## **Reimbursement**

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Doctoral students who are registered with the *Swiss Doctoral Program in Mathematics* can apply for reimbursement of travel costs connected to the participation and [validation](#) of an activity of the *Doctoral Program* by sending the reimbursement form to

*Norbert Hungerbühler  
Department of Mathematics  
University of Fribourg, Pérolles  
Chemin du musée 23  
CH-1700 Fribourg*

Download the [reimbursement form](#) (only valid if attached to the [validation form](#) for the same activity).

Observe that, during the pilot phase 2006-08, doctoral students from Geneva and Neuchâtel are refunded by money from the *Triangle Azur*, while students from Basel, Bern and Fribourg are refunded by local sources.

# Swiss Doctoral Program in Mathematics

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## Reimbursement Form

*This form is only valid if attached to the the corresponding validation form, and with all original receipts!*

I would like to apply for reimbursement of the following costs:

Travel: .....  
..... Amount: .....

Accommodation: .....  
..... Amount: .....

Other: .....  
..... Amount: .....

My bank connection:

.....  
.....  
.....  
.....

Name: .....

Date: .....

Signature: .....

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Please send this form to:  
Norbert Hungerbühler, Department of Mathematics, University of Fribourg, Pérolles, CH-1700 Fribourg

# **Swiss Doctoral Program in Mathematics**

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## **Reporting**

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The progress of graduate students within the *Doctoral Program* is evaluated each year by the *Doctoral Program Committee* or the *Director* on the basis of the credits obtained by doctoral students. The *Doctoral Program* works in close contact with the thesis advisors of the graduate students. In particular, the progress evaluation is communicated to the thesis advisors.

Doctoral students submit **yearly a report** documenting their activities related to the *Doctoral Program*. They can include a summary of their research results. The report is to be sent at the end of the academic year to

*Norbert Hungerbühler  
Department of Mathematics  
University of Fribourg, Pérolles  
Chemin du musée 23  
CH-1700 Fribourg*

Upon conferral of your doctorate please send a notice to the same address with your postal address. You will then receive your **certificate** of the *Doctoral Program*.

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## Program of the academic year 2007/2008

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### COLOR CODE GUIDE

Recommended for all doctoral students

Recommended for all doctoral students working in the field

Recommended for advanced doctoral students working in the field

### Graduate Course: Residues and Topology

Prof. [Andras Szenes](#), University of Geneva

Fall term 2007 and Spring term 2008

Time: Tuesday 15:15 - 17:00, followed by Exercises 17:15 - 18:00

Place: University of Geneva, [Section de Mathématiques salle 624](#)

**Abstract:** Differential forms on manifolds. Vector bundles and characteristic classes. Problems in enumerative geometry and integration manifolds. Residues in several dimensions. The Bott residues formula and its applications to enumerative geometry. Residues and quotients by group actions.

### Graduate Course: L'invariance conforme en physique mathématique

Prof. [Stanislav Smirnov](#), University of Geneva

Fall term 2007

Time: Friday, 10:15 - 12:00, starting September 21

Place: University of Geneva, [Section de Mathématiques salle 623](#)

**Contents:** Mouvement brownien, Courbes de Schramm-Loewner, Modele d'Ising, Percolation, Champ libre Gaussien, etc

### Third Graduate Colloquium

January 24-25, 2008, Bern

Organizer: [Stephane Materna](#), [Thomas Zürcher](#)

### Geometry Week in Neuchâtel

February 11-15, 2008, Neuchâtel

Organizer: [Bruno Colbois](#)

**Journée de Rham (IIIe Cycle Romand de Mathématiques)**

EPFL, March 5, 2008

**Jean-Christophe Yoccoz** and **Gang Tian**

Organizer: Norbert Hungerbühler, Francine Meylan, Paolo de Bartolomeis

**Séminaire hors-ville du III Cycle Romand de Mathématiques: Groups and Dynamics**

Les Diablerets, March 9-14, 2008

Organization: [Tatiana Smirnova-Nagnibeda](#)

**Schweizer Numerik Kolloquium / Colloque Numérique Suisse**

Numerical Analysis, Scientific Computing

Fribourg, April 25, 2008

Organization: [Jean-Paul Berrut](#), [Ales Janka](#)

**Topology in the Swiss Alps: Young Topologists' Meeting**

Le Châtelard, Mai 26-31, 2008

Organization: [patrick.muller@epfl.ch](mailto:patrick.muller@epfl.ch)

**Analyse, géométrie et dynamique sur les groupes**

Neuchâtel, June 11-13, 2008

Organization: [Alain Valette](#)

**Mini course: Graphs and complexes of groups**

Neuchâtel, June 2-23, 2008

Instructor: Seonhee Lim

Organization: [Alain Valette](#)

**Workshop: Symmetries in Geometry & Topology 2008**

Fribourg, July 3-5, 2008

Organization: [Anand Dessai](#), Uwe Semmelmann, Wilderich Tuschmann

**Mini Course by Pengfei Guan: Topics of nonlinear partial differential equations in complex geometry**

Event in the framework of the [Conference on Complex Analysis 2008](#).

Fribourg, Monday, July 7, 2008

Organization: [Norbert Hungerbühler](#)

### **Poisson 2008 School**

Bernoulli Center at EPFL, July 1-4, 2008

Info: [Anton Alekseev](#)

### **Poisson 2008: Poisson Geometry in Mathematics and Physics**

Bernoulli Center at EPFL, July 7-11, 2008

Info: [Anton Alekseev](#)

### **Mini Course by Mei-Chi Shaw: Methods of partial differential equations in several complex variables**

Event in the framework of the [Conference on Complex Analysis 2008](#).

Fribourg, Tuesday, July 8, 2008

Organization: [Norbert Hungerbühler](#)

### **Mini Course by Ngaiming Mok: Holomorphic maps on bounded symmetric domains of rank $\geq 2$ : Ergodic Theory, bounded holomorphic functions and geometric structures**

Event takes place in the framework of the [Conference on Complex Analysis 2008](#).

Fribourg, Thursday, July 10, 2008

Organization: [Norbert Hungerbühler](#)

### **Summer School: Bounded Cohomology, Coxeter Groups and Hyperbolic Geometry**

August 18 - 20, 2008, Fribourg

Instructors: Michelle Bucher-Karlsson (KTH Stockholm), Anna Felikson (Moscow/Fribourg), Pavel Tumarkin (Moscow/Fribourg)

Organization: [Ruth Kellerhals](#)

### **Conference on Algebraic Topology**

August 18 - 24, 2008, Arolla

Organization: [Christian Ausoni](#) (Bonn), [Kathryn Hess](#) (EPFL), [Jérôme Scherer](#) (Barcelona)

### **Séminaire Borel, III Cycle Romand de Mathématiques: New approaches to curvature**

Les Diablerets, August 24 - 29, 2008

Organization: [Andreas Bernig](#), [Bruno Colbois](#)

### **Workshop: Analytic Properties of Infinite Groups**

Geneva, August 25 - 29, 2008

Organization: [Goulnara Arjantseva](#), [Nicolas Monod](#)

### **Three Mini-courses and a Workshop. Field: Probability, Statistical Mechanics.**

Neuchâtel, September 1-12, 2008

Mini-courses (September 1-10):

- Béatrice de Tilière (Neuchâtel): *The dimer model in Statistical Mechanics*
- Grégory Maillard (EPFL): *Infinite memory chains and Gibbs measures*
- Yvan Velenik (Geneva): *The Ising model*

Workshop (September 11-12): Consists of research seminars accessible to doctoral students in the field of probability.

Info: [Béatrice de Tilière](#)

### **CIME-EMS School in Applied Mathematics Mathematical models in the manufacturing of glass, polymers and textiles**

Pistoia, September 8 - 19, 2008

Antonio Fasano (Firenze), John Ockendon (Oxford)

Info: [Rolf Jeltsch](#)

### **Fourth Graduate Colloquium**

September 18 - 19, 2008, Neuchâtel

Organization: [Kolawolé Atchade](#), [Gregory Roth](#)

### **Séance d'information pour doctorant-e-s**

September 18, 2008, Geneva

Organization: [Eliane.Barth@rectorat.unige.ch](mailto:Eliane.Barth@rectorat.unige.ch)

### **Graduate Course of the III Cycle: Mathematical aspects of cryptology**

Prof. [Arjen Lenstra](#), EPFL

Fall term 2008, Wednesdays, 11:15 - 12:30, start: September 17

Place: EPFL, room will be announced



**Graduate Course of the III Cycle: [Elliptic Genera](#)**

Prof. [Anand Dessai](#), Fribourg

Fall term 2008, Wednesdays, 14:15 - 15:30, start: September 17

Place: EPFL, room will be announced

**Graduate Course of the III Cycle: [Poisson Lie groups and Poisson homogeneous spaces](#)**

Prof. [Jiang-Hua Lu](#), University of Hongkong, visiting CIB

Fall term 2008, Wednesdays, 15:45 - 17:00, start: September 17

Place: EPFL, room will be announced

# Swiss Doctoral Program in Mathematics

Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel

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## Program of the academic year 2008/2009

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Link to the program of the academic year [2006/2007](#), [2007/2008](#).

### COLOR CODE GUIDE

Recommended for all doctoral students

Recommended for all doctoral students working in the field

Recommended for advanced doctoral students working in the field

### Three Mini-courses and a Workshop. Field: Probability, Statistical Mechanics.

Neuchâtel, September 1-12, 2008

Mini-courses (September 1-10):

- Béatrice de Tilière (Neuchâtel): *The dimer model in Statistical Mechanics*
- Grégory Maillard (EPFL): *Infinite memory chains and Gibbs measures*
- Yvan Velenik (Geneva): *The Ising model*

Workshop (September 11-12): Consists of research seminars accessible to doctoral students in the field of probability.

Info: [Béatrice de Tilière](#)

### CIME-EMS School in Applied Mathematics **Mathematical models in the manufacturing of glass, polymers and textiles**

Pistoia, September 8 - 19, 2008

Antonio Fasano (Firenze), John Ockendon (Oxford)

Info: [Rolf Jeltsch](#)

### Fourth Graduate Colloquium

September 18 - 19, 2008, Neuchâtel

Organization: [Kolawolé Atchade](#), [Gregory Roth](#)

### Séance d'information pour doctorant-e-s

September 18, 2008, Geneva

Organization: [Eliane.Barth@rektorat.unige.ch](mailto:Eliane.Barth@rektorat.unige.ch)

**Graduate Course of the III Cycle: [Mathematical aspects of cryptology](#)**

Prof. [Arjen Lenstra](#), EPFL

Fall term 2008, Wednesdays, 11:15 - 12:30, start: September 17

Place: EPF Lausanne, room GR A3 30

**Graduate Course of the III Cycle: [Elliptic Genera](#)**

Prof. [Anand Dessai](#), Fribourg

Fall term 2008, Wednesdays, 14:15 - 15:30, start: September 17

Place: EPF Lausanne, room CM 1 106

**Graduate Course of the III Cycle: [Poisson Lie groups and Poisson homogeneous spaces](#)**

Prof. [Jiang-Hua Lu](#), University of Hongkong, visiting CIB

Fall term 2008, Wednesdays, 15:45 - 17:00, start: September 17

Place: EPF Lausanne, room CM 1 106

**Workshop: [Integral geometry and Finsler geometry](#)**

Organization: [Andreas Bernig](#), [Gautier Berck](#) (Fribourg)

Fribourg, January 21 - 23, 2009

**Fifth Graduate Colloquium**

January 29 - 30, 2009, Fribourg

Organization: [Thomas Mettler](#), [Geneviève Perren](#)

**Winter School: Closed Geodesics**

Neuchâtel, 6-14 February, 2009

Organization: [Felix Schlenk](#) (Neuchâtel)

**Course by Paul Turner (Heriot-Watt University): [Khovanov homology](#)**

The course is a good preparation for the Swiss Knot Theory workshop (see below).

EPFL, during the first half of the spring term 2009

Organization: [Kathryn Hess Bellwald](#) (EPFL), [Alain Jeanneret](#) (Bern)

### **Séminaire hors-ville du III Cycle Romand de Mathématiques: Calcul des variations et équations aux dérivées partielles**

Les Diablerets, March 8-13, 2009

Organization: [Bernard Dacorogna](#), [Charles A. Stuart](#), [Boris Buffoni](#) (EPFL)

### **Cours by Antonio Costa and José Montesinos: Groupes cristallographiques**

Organization: [Cam Van Quach Hongler](#) (Geneva)

EPFL, March and April 2009

### **Workshop: Swiss Knot Theory**

The course of Paul Turner is a good preparation for this workshop (see above).

Fribourg, 19-21 March, 2009

Organization: [Ruth Kellerhals](#) (Fribourg), [Sebastian Baader](#) (ETHZ), [David Cimasoni](#) (ETHZ), [Cam Van Quach Hongler](#) (Geneva), [Paul Turner](#) (Heriot-Watt University)

### **Journée de Rham (IIIe Cycle Romand de Mathématiques)**

**Curtis McMullen** (Harvard University) and **Peter Sarnak** (Princeton University)

EPFL, end of March 2009

Organizer: [Nicolas Monod](#), [Philippe Michel](#) (EPFL)

### **Mini Course by B. Ammann (Regensburg): Laplacien conforme**

Event takes place in the framework of the Spring Meeting of the Swiss Mathematical Society

Neuchâtel, 8-12 June, 2009

Organization: [Bruno Colbois](#), [Simon Raulot](#) (Neuchâtel), [Patrick Ghanaat](#) (Fribourg)

### **Mini Course by D. Schueth (Berlin): Isospectralité**

Event takes place in the framework of the Spring Meeting of the Swiss Mathematical Society

Neuchâtel, 8-12 June, 2009

Organization: [Bruno Colbois](#), [Simon Raulot](#) (Neuchâtel), [Patrick Ghanaat](#) (Fribourg)

### **Mini Course by A. Savo (Rome): Spectre des formes différentielles sur les domaines**

Event takes place in the framework of the Spring Meeting of the Swiss Mathematical Society

Neuchâtel, 8-12 June, 2009

Organization: [Bruno Colbois](#), [Simon Raulot](#) (Neuchâtel), [Patrick Ghanaat](#) (Fribourg)

### **Séminaire Borel, III Cycle Romand de Mathématiques: Statistical mechanics and combinatorics**

Les Diablerets, June 2008

Organization: [Stanislav Smirnov](#), [Yvan Velenik](#) (Geneva)

### **Sixth Graduate Colloquium**

September 2009, Geneva

Organization: tba

### **Graduate Course of the III Cycle: Special topics in biomathematics**

Prof. [Christian Mazza](#), Prof. [Jean-Pierre Gabriel](#) (Fribourg)

Fall term 2009, Wednesdays, 11:15 - 12:30, start: September 16

Place: EPFL, room will be announced

### **Graduate Course of the III Cycle: Introduction to global singularity theory**

Prof. [Andras Szenes](#) (Geneva)

Fall term 2009, Wednesdays, 14:15 - 15:30, start: September 16

Place: EPFL, room will be announced

### **Graduate Course of the III Cycle: Numerical ranges of matrices and linear operators**

Prof. [Christiane Tretter](#) (Bern)

Fall term 2009, Wednesdays, 15:45 - 17:00, start: September 16

Place: EPFL, room will be announced

# **Swiss Doctoral Program in Mathematics**

*Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel*

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## **Recommended external Activities**

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- [Ecole doctorale de mathématiques Genève - Neuchâtel](#)
- [IIIe Cycle romand de Mathématiques](#)
- [Zurich Graduate School in Mathematics](#)
- [Ecole doctoral de l'EPFL](#)
- [Graduate Program in mathematics of Bern and Fribourg](#)

# Swiss Doctoral Program in Mathematics

Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel

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## Advanced Courses 2007/08

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Specific courses which are held in the framework of a master program are also qualified for PhD students. Such courses can be announced on this page using the usual [form](#) and are thereby open for all PhD students participating in the Doctoral Program. In order to minimize travelling, it is recommended to organize such courses in a bi-weekly rhythm or as block courses.

<b>Course: Residues and Topology</b>
Prof. <a href="#">Andras Szenes</a> , University of Geneva
Fall term 2007 and Spring term 2008
Course: Tuesday 15:15 - 17:00, followed by Exercises 17:15 - 18:00 University of Geneva, <a href="#">Section de Mathématiques salle 624</a>
<b>Abstract:</b> Differential forms on manifolds. Vector bundles and characteristic classes. Problems in enumerative geometry and integration manifolds. Residues in several dimensions. The Bott residues formula and its applications to enumerative geometry. Residues and quotients by group actions.

<b>Course: L'invariance conforme en physique mathématique</b>
Prof. <a href="#">Stanislav Smirnov</a> , University of Geneva
Fall term 2007
Course: Friday, 10:15 - 12:00, starting September 21 University of Geneva, <a href="#">Section de Mathématiques salle 623</a>
<b>Contents:</b> Mouvement brownien, Courbes de Schramm-Loewner, Modele d'Ising, Percolation, Champ libre Gaussien, etc

# Swiss Doctoral Program in Mathematics

Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel

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## Advanced Courses 2008/09

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Specific courses which are held in the framework of a master program are also qualified for PhD students. Such courses can be announced on this page using the usual [form](#) and are thereby open for all PhD students participating in the Doctoral Program. In order to minimize travelling, it is recommended to organize such courses in a bi-weekly rhythm or as block courses.

Link to the advanced courses of the academic year [2006/2007](#), [2007/2008](#).

<b>Course: Introduction to Gamma-convergence</b>
Prof. <a href="#">Norbert Hungerbühler</a> , University of Fribourg
Academic year 2008/09
Course: Friday, 08:15-10:00, Room 2.301 Geosciences Building <a href="#">University of Fribourg, Pérolles</a>
<b>Contents:</b> This course is an introduction into the concept of Gamma-Convergence. We start by a brief discussion of the direct method in the calculus of variations. Then we discuss the idea of Gamma convergence: Suppose a sequence $F_n$ of functionals is given, along with a minimizer $x_n$ for every $F_n$ . Then, if the sequence $x_n$ of minimizers converges in some sense to $x$ , one may ask under which hypotheses $x$ is in a natural way minimizer of a limiting functional $F$ . The Gamma Convergence gives a precise answer to this question. In the course we will then investigate properties of the Gamma Convergence and relations to other topologies. In addition we will treat some examples and applications from homogenization and elasticity theory.

<b>Course: Riemannian Geometry</b>
Prof. <a href="#">Andreas Bernig</a> , University of Fribourg
Fall term 2008
Course: Thursday, 13:15-17:00, Room 2.52, Physics Building <a href="#">University of Fribourg, Pérolles</a>
<b>Contents:</b> Riemannian manifolds, geodesics, curvatur and topology <b>Literature:</b> <ul style="list-style-type: none"><li>• Gallot-Hulin-Lafontaine: Riemannian Geometry, Springer</li><li>• Jost: Riemannian geometry and geometric analysis, Springer</li><li>• Kühnel: Differential geometry. Curves - surfaces - manifolds. AMS.</li></ul>



**Prerequisite:** Algebra and Geometry, Analysis.

**Remarks:** This course will be held in English. Physics students are also welcome. In the summer semester 2009, a course on more advanced topics will be proposed by Prof. W. Tuschmann.

# Swiss Doctoral Program in Mathematics

Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel

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## Doctoral Student's Page academic year 2007/08

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On this page, all Doctoral Students of the *Doctoral Program* can announce their own talks, presentations, mini-courses etc. To do so, please fill in the corresponding [form](#).

### Shaula Fiorelli Vilmart (Geneva)

Two lectures in the [Séminaire de la Tortue](#) - Groupe de travail sur la théorie de Hodge, Geneva  
09.04.2008, 10:30: Opérateurs  $\partial$  et  $\bar{\partial}$   
23.04.2008, 16:30: suite

### Vincent Emery (Fribourg)

Lecture at the [Graduate Colloquium](#) of the Swiss Doctoral Program, Bern  
24.1.2008, 14:30: Arithmetic covolume of the modular group

### Jonas Budmiger (Basel)

Lecture at the [Graduate Colloquium](#) of the Swiss Doctoral Program, Bern  
24.1.2008, 16:00: An Example of an  $SL_2$ -Hilbert Scheme

### Clément Hongler (Geneva)

Lecture at the [Graduate Colloquium](#) of the Swiss Doctoral Program, Bern  
25.1.2008, 09:30: Scaling limit of percolation

### Imbo Sim (Basel)

Lecture at the [Graduate Colloquium](#) of the Swiss Doctoral Program, Bern  
25.1.2008, 11:00: Interaction between elastic body and acoustic wave

### Claudio Somaini (Bern)

Lecture at the [Graduate Colloquium](#) of the Swiss Doctoral Program, Bern  
25.1.2008, 14:00: Open orbits in the representation spaces of quivers

### Luc Guyot (Geneva)

Lecture at the [Graduate Colloquium](#) of the Swiss Doctoral Program, Bern  
25.1.2008, 15:30: The space of subgroups of a countable abelian group

### Rudolf Rohr (Geneva): Thesis Defense

Thursday, June 5, 2008, 16:15

Section de Mathématiques de Genève, Salle 17, 2ième étage, 2-4, rue du Lièvre, 1211 Genève 4

Title: **Algèbres de Lie et algèbres de Clifford**

**Samuel Monnier (Geneva): Thesis Defense**

Thursday, June 12, 2008, 16:15

Section de Mathématiques de Genève, Salle 17, 2ième étage, 2-4, rue du Lièvre, 1211 Genève 4

Title: **Flots de renormalisation au bord du modèle de Wess-Zumino-Witten**

# Swiss Doctoral Program in Mathematics

Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel

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## Doctoral Student's Page academic year 2008/09

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On this page, all Doctoral Students of the *Doctoral Program* can announce their own talks, presentations, mini-courses etc. To do so, please fill in the corresponding [form](#).

Link to the doctoral student's page of the academic year [2006/2007](#), [2007/2008](#).

### **Soyoung Moon (Neuchâtel)**

Lecture at the [Graduate Colloquium](#) of the Swiss Doctoral Program, Neuchâtel  
18.9.2008, 10:00: Topics on amenable actions: results and their applications

### **Stéphane Materna (Bern)**

Lecture at the [Graduate Colloquium](#) of the Swiss Doctoral Program, Neuchâtel  
18.9.2008, 11:30: Zero set of semi-invariants

### **Roland Lötscher (Basel)**

Lecture at the [Graduate Colloquium](#) of the Swiss Doctoral Program, Neuchâtel  
18.9.2008, 14:15: Multihomogeneous covariants and the essential dimension of finite groups

### **Shaula Fiorelli Vilmart (Geneva)**

Lecture at the [Graduate Colloquium](#) of the Swiss Doctoral Program, Neuchâtel  
18.9.2008, 15:45: Study of circles tangent to three given conics

### **Reto Berger (Bern)**

Lecture at the [Graduate Colloquium](#) of the Swiss Doctoral Program, Neuchâtel  
19.9.2008, 10:00: Self similar dimension and Hausdorff dimension

### **Geneviève Perren (Fribourg)**

Lecture at the [Graduate Colloquium](#) of the Swiss Doctoral Program, Neuchâtel  
19.9.2008, 11:30: Growth series and Coxeter groups

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**Thomas Zürcher (Bern)**

Lecture at the [Graduate Colloquium](#) of the Swiss Doctoral Program, Neuchâtel  
19.9.2008, 14:15: Example of a mapping that does not satisfy Lusin's condition (N)

**Gilles Vilmart (Geneva): Thesis Defense**

Doctorat en cotutelle entre l'Université de Genève et l'Université de Rennes 1 (France)

Monday, December 1st, 2008, 16:15  
Section de Mathématiques de Genève, Salle 17, 2ième étage, 2-4, rue du Lièvre, 1211 Genève 4

Title: **Étude d'intégrateurs géométriques pour des équations différentielles**

Note: A second talk is planned on Wednesday, December 10th in Rennes (ENS Cachan Antenne de Bretagne, Ker Lann).

# Swiss Doctoral Program in Mathematics

Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel

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## Thesis Defenses academic year 2007/08

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On this page, all Doctoral Students of the *Doctoral Program* can announce their Thesis Defense. To do so, please fill in the corresponding [form](#).

### **Luc Guyot (Geneva): Thesis Defense**

Thursday, November 22, 2007, 16:15

Section de Mathématiques de Genève, Salle 17, 2ième étage, 2-4, rue du Lièvre, 1211 Genève 4

Title: **Points isolés, limites et dimensions métriques dans l'espace des groupes**

### **Rudolf Rohr (Geneva): Thesis Defense**

Thursday, June 5, 2008, 16:15

Section de Mathématiques de Genève, Salle 17, 2ième étage, 2-4, rue du Lièvre, 1211 Genève 4

Title: **Algèbres de Lie et algèbres de Clifford**

### **Samuel Monnier (Geneva): Thesis Defense**

Thursday, June 12, 2008, 16:15

Section de Mathématiques de Genève, Salle 17, 2ième étage, 2-4, rue du Lièvre, 1211 Genève 4

Title: **Flots de renormalisation au bord du modèle de Wess-Zumino-Witten**

# Swiss Doctoral Program in Mathematics

Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel

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## Thesis Defenses academic year 2008/09

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Link to the list of the academic year [2006/07](#), [2007/08](#).

<b>Gilles Vilmart (Geneva): Thesis Defense</b>
Doctorat en cotutelle entre l'Université de Genève et l'Université de Rennes 1 (France)
Monday, December 1st, 2008, 16:15 Section de Mathématiques de Genève, Salle 17, 2ième étage, 2-4, rue du Lièvre, 1211 Genève 4
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# **Swiss Doctoral Program in Mathematics**

*Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel*

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## **Math Departments worldwide**

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### **Directories with lists of Mathematics Departments**

- [Luchsinger's Worldwide Department Index](#)
- [Google Academic Math Departments](#)
- [The Penn State Math Directory](#)
- [The Florida State Math Directory](#)



# **Swiss Doctoral Program in Mathematics**

*Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel*

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## **Mathematical Societies**

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### **Quick links**

- [Swiss Mathematical Society](#)
- [DMV Deutsche Mathematiker-Vereinigung](#)
- [EMS European Mathematical Society](#)
- [AMS American Mathematical Society](#)
- [IMU International Mathematical Union](#)
- [SIAM Society for Industrial and Applied Mathematics](#)
- [LMS London Mathematical Society](#)
- [GAMM Gesellschaft für Angewandte Mathematik und Mechanik](#)
- [ÖMG Österreichische Mathematische Gesellschaft](#)
- [UMI Unione Matematica Italiana](#)
- [SMF Société Mathématique de France](#)
- [SMAI Société de Mathématiques Appliquées](#)
- [ICIAM International Council for Industrial and Applied Mathematics](#)
- [GMFH/SMHES Gesellschaft für Mathematik an den Schweizer Fachhochschulen](#)
- [VSMP/SSPMP Verein der Schweizerischen Mathematik- und Physiklehrpersonen](#)

### **Other directories**

- [Luchsinger's Worldwide Society Index](#)
- [EMS Member Societies](#)
- [IMU Member Societies](#)
- [ICIAM Member Societies](#)

# Swiss Doctoral Program in Mathematics

Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel

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## Search results

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*Advisor* Norbert A'Campo

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DATA

To see your record, click on DATA and enter your password.

# Swiss Doctoral Program in Mathematics

Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel

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## Your data record

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To notify an achievement or change your data, please use the [validation form](#) or send an e-mail to [norbert.hungerbuehler@unifr.ch](mailto:norbert.hungerbuehler@unifr.ch).

### Basic Data

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Advisor	<a href="#">Hanspeter Kraft</a>
Entry date	2006-08-10

### Program Achievements

#### Category 1: Participation in graduate courses

##### Graduate Course: Local Cohomology and Sheaf Cohomology

Fall term 2007, University of Zürich

Instructor: Markus Brodmann

ECTS points: 3

Reimbursement: 382.50 CHF

##### Graduate course: Algebraische Zahlentheorie

Fall term 2007, University of [Basel](#)

Instructor: David Masser

ECTS points: 3

#### Category 3: Presentation of own research results

##### [Jonas Budmiger](#) (Basel)

Lecture at the [Graduate Colloquium](#) of the Swiss Doctoral Program, Bern  
24.1.2008, 16:00: An Example of an  $SL_2$ -Hilbert Scheme

ECTS points: 3



## Category 5: Complementary scientific training

<b>Second Graduate Colloquium</b>
May 29 - 30, 2007, Basel
Organization: <a href="#">Jonas Budmiger</a> , <a href="#">Philipp Habegger</a>
<i>ECTS points: 3</i>

## Category 6: Work as assistant

<b>Teaching, tutoring, administration</b>
Mathematics Institute, University of Basel
<i>ECTS points: 6</i>

## Prizes

<b>Third Graduate Colloquium</b>
January 24-25, 2008, Bern
<b>Jonas Budmiger: Birkhäuser Prize for the Best Talk</b>

## Summary

Category	Required	Attained
1	9	6
2	6	0
3	6	3
4		0
5		3
6		6
<i>Total</i>	<i>30</i>	<i>18</i>
<b>Total reimbursement</b>		
<i>382.5 CHF</i>		

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## Research Groups

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Professor	University	Field
<a href="#">Michel Benaïm</a>	<a href="#">Neuchâtel</a>	Probability
<a href="#">Bruno Colbois</a>	<a href="#">Neuchâtel</a>	Riemannian geometry, metric geometry
<a href="#">Anand Dessai</a>	<a href="#">Fribourg</a>	Geometric topology (Lie group actions on manifolds, elliptic genera, curvature and symmetry)
<a href="#">Norbert Hungerbühler</a>	<a href="#">Fribourg</a>	Nonlinear PDEs, geometric evolution problems, calculus of variations
<a href="#">Ruth Kellerhals</a>	<a href="#">Fribourg</a>	Hyperbolic Geometry, Geometry of Discrete Groups
<a href="#">Hanspeter Kraft</a>	<a href="#">Basel</a>	algebraic transformation groups, representation theory, geometric and computational invariant theory
<a href="#">David Masser</a>	<a href="#">Basel</a>	Number theory (diophantine geometry, diophantine approximation, and transcendental numbers)
<a href="#">Alain Valette</a>	<a href="#">Neuchâtel</a>	Analysis on groups (group algebras, harmonic analysis, geometric group theory)
<a href="#">Yvan Velenik</a>	<a href="#">Geneva</a>	Probability theory, statistical physics

# Swiss Doctoral Program in Mathematics

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## Prizes

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On the occasion of the **Graduate Colloquium** of the Swiss Doctoral Program **Birkhäuser Publishing House** awards a prize for the best talk and a prize for the best poster.

Date	Prize	Laureate
8.12.2006	Best talk	Philipp Habegger (Basel)
8.12.2006	Best poster	François Fillastre (Neuchâtel)
29.5.2007	Best talk	Thierry Hild (Fribourg)
29.5.2007	Best poster	Shaula Fiorelli (Geneva)
13.9.2007	Swiss Academy of Sciences: Prix Jeunes Chercheures	Jonas Budmiger (Basel)
13.9.2007	Swiss Academy of Sciences: Prix A.F. Schläfli	Tatiana Mantuano (Neuchâtel)
25.1.2008	Best talk	Jonas Budmiger (Basel)
25.1.2008	Best poster	Clément Hongler (Geneva)
19.9.2008	Best talk	Roland Lötscher (Basel)
19.9.2008	Best poster	Yves Courvoisier (Geneva)

# Swiss Doctoral Program in Mathematics

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## Jobs and Grants

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### Current Academic Job Announcements in Switzerland

- EPF Lausanne: [Faculty positions in mathematical analysis](#)
- University of Basel: [Professorship in Computational Mathematics](#)
- University of Basel: [Professorship in Analysis](#)
- University of Bern: [Full Professor: Algebra or Topology](#)
- University of Bern: [Assistant Professor: Logic or Foundations of Mathematics or Universal Algebra](#)
- University of Neuchâtel: [Maître Assistant \(80%, 4 years\)](#)
- University of Geneva: [Professor position](#)

### Teaching in Switzerland

- [Kantonsschule Solothurn](#): Stellvertretung Mathematik, 10. bis 28. November 2008. [Information](#)

### Permanent Math Job Pages in Switzerland

- [University of Basel](#)
- [University of Fribourg](#)
- [University of Genève](#)
- [ETH Zürich](#)
- [Seminar Angewandte Mathematik, ETHZ](#)
- [Institute for Operations Research, ETHZ](#)
- [University of Zürich](#)

### General Math Job Pages

- Luchsinger's Job Pages: [Switzerland, worldwide](#)
- [EuroScienceJobs](#)
- [Careerjet](#)
- [Career.edu](#)
- [Euro-Math-Job](#)
- [Stellenbörse Mathematik](#)
- [SIAM Job Page](#)
- [The Statistics and Mathematics career source](#)

- [Data Shaping Solutions - Job search](#)
- [Data Shaping Solutions - Resumes](#)

## Mathematicians and Statisticians

... and their way to professional independence:

- an essay of [Dr. C.J. Luchsinger](#).

## Grants

- [Swiss National Science Foundation](#)
- [European Grants](#)
  - [General FP7](#)
  - [CORDIS FP7](#)
  - [CORDIS FP7 Ideas](#)
  - [ERC Starting Independent Research Grant \(pdf\)](#)
  - [Find a call](#) (there, click on *Ideas: 2006-12-22: ERC-2007-StG*)

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*Universities of Basel, Bern, Fribourg, Geneva, and Neuchâtel*

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## **Documents**

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This is a repository for documents of general interest. To post such a document, please send it to [norbert.hungerbuehler@unifr.ch](mailto:norbert.hungerbuehler@unifr.ch).

- [How to write your first article](#) (Steven G. Krantz)
- [How to Give a Good Colloquium](#) (John E. McCarthy)
- [Instructions for typesetting a poster](#)
- What is a doctorate? The position of the CRUS: [deutsch](#), [français](#)