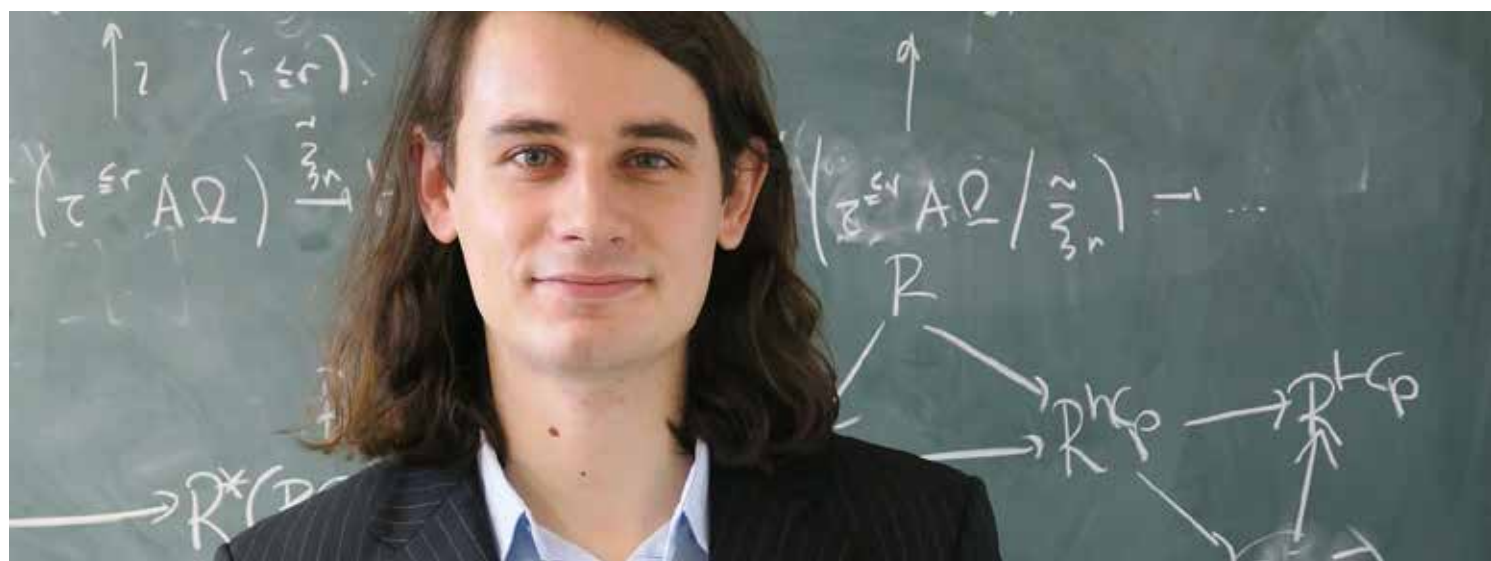




# hcm NEWS 2/2017



## HAUSDORFF SPECIALS



# Peter Scholze inducted into the Academy of Science and Literature

*Press release of the University of Bonn from January 17, 2017*

**In its last meeting, the Academy of Science and Literature in Mainz inducted the mathematician Prof. Dr. Peter Scholze, born in 1987, as its youngest ordinary member to date. Since 2012, Professor Scholze has been a professor at the Hausdorff Center for Mathematics, which is the cluster of excellence for mathematics at the University of Bonn.**

In 2012, at the age of only 24, Prof. Dr. Peter Scholze was appointed as a professor at the cluster of excellence at the University of Bonn and is therefore the youngest professor of mathematics in Germany. Currently, he is one of the leading researchers in the world in the area of arithmetic and algebraic geometry, and deals with problems concerning the Langlands program and the p-adic Hodge theory. His research areas are in pure mathematics and have many relations to other fields of mathematics and its applications. Peter Scholze made pioneering contributions to several

fundamental mathematical problems and is already one of the leading researchers in mathematics.

Born in Dresden in 1987 and raised in Berlin, he did his Abitur in Berlin in 2007. By this time, he had already won several gold medals at the Mathematical Olympiad. In 2012, he finished his studies of mathematics in Bonn with his doctoral thesis advised by Prof. Dr. Michael Rapoport.

Peter Scholze was an invited speaker at the International Congress of Mathematicians in 2014 and has been awarded several renowned prizes. In 2015, he received the Ostrowski Prize and the Fermat prize, in 2016, the Prize of the Academy of the Berlin-Brandenburg Academy of Sciences and Humanities and was the youngest researcher ever to receive the Leibniz Prize of the German Research Foundation (DFG). The foundation praised his work in their statement as "as persuasive as it is elegant".

## HAUSDORFF SPECIALS

## Awards for best bachelor degrees and Hausdorff Prize

February 1, 2017

Every year the Bonn Mathematical Society awards a prize for the best graduating Bachelor students in mathematics. The Fachgruppe Mathematik rewards the best dissertation of the year with the Hausdorff Prize.

In the academic year 2015/2016, Thorsten Beckmann, Michael Stahlhauer, Vincent Skiera and Fan Wu received the prizes for the best graduating Bachelor students.

**Thorsten Beckmann:** “Motivic Integration”  
advisor: Prof. Dr. Daniel Huybrechts

**Michael Stahlhauer:** “Bredon-Kohomologie”  
advisor: Prof. Dr. Stefan Schwede

**Vincent Skiera:** “Model Independent Asset Pricing”  
advisor: Dr. Robert Philipowski

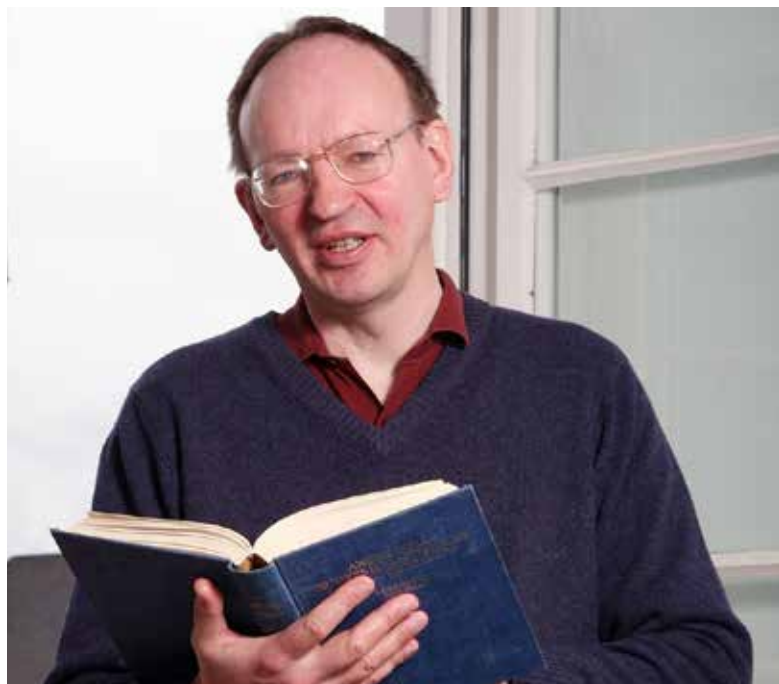
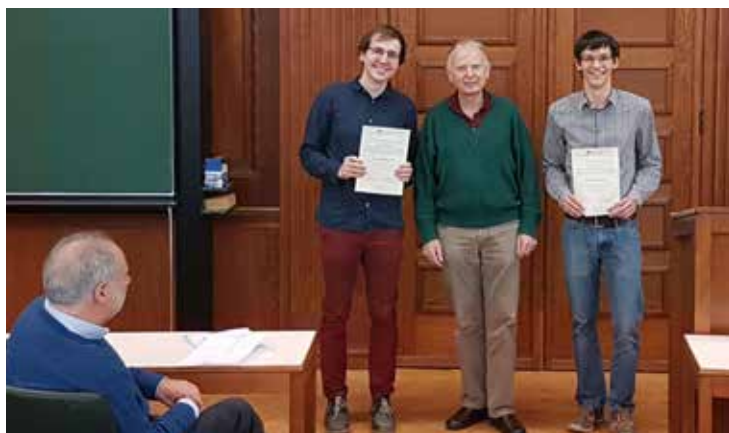
**Fan Wu:** “Störungstheorie für Markovketten”  
advisor: Prof. Dr. Andreas Eberle

The Hausdorff Prize for the best dissertation of the academic year 2015/2016 was awarded to **Dr. Stefan Schreieder** for his thesis on “Construction Problems in Algebraic Geometry and the Schottky Problem” (advisor: Prof. Dr. Daniel Huybrechts).



**left:** Dr. Stefan Schreieder, Prof. Dr. Christoph Thiele (from left)

Thorsten Beckmann, Prof. Dr. Ingo Lieb (Präsident der Bonner Mathematischen Gesellschaft) und Michael Stahlhauer (from left)



## High honor for Gerd Faltings

News of the University of Bonn from February 9, 2017

**Gerd Faltings is receiving the Cantor medal of the German Mathematical Society (Deutsche Mathematiker-Vereinigung, DMV) for his outstanding scientific achievements over many years.**

Prof. Dr. Faltings is a director at the Max Planck Institute for Mathematics in Bonn and member of the Hausdorff Center for Mathematics, which is the cluster of excellence for mathematics and theoretical economics at the University of Bonn. He is the only German mathematician who was awarded the Fields Medal, the highest distinction in mathematics.

The Cantor medal is the highest scientific award conferred by the DMV. The prize is endowed with 4,000 euros, but the reputation is what counts. Faltings work revolutionized the algebraic geometry and spread out to other areas of mathematics, for example number theory. Faltings was already well-known internationally in 1983, when the 28-year-old professor of mathematics at the University of Wuppertal proved the “Mordell Conjecture”, a milestone for an unsolved problem formulated by the American-British mathematician Louis Joel Mordell in 1922. With the Cantor medal, the DMV honors Gerd Faltings’ lifetime achievements. The medal is presented at the annual meeting of the DMV, which takes place this year from September 11 to 15 and is held together with the Austrian Mathematical Society (ÖMG) in Salzburg (Austria).

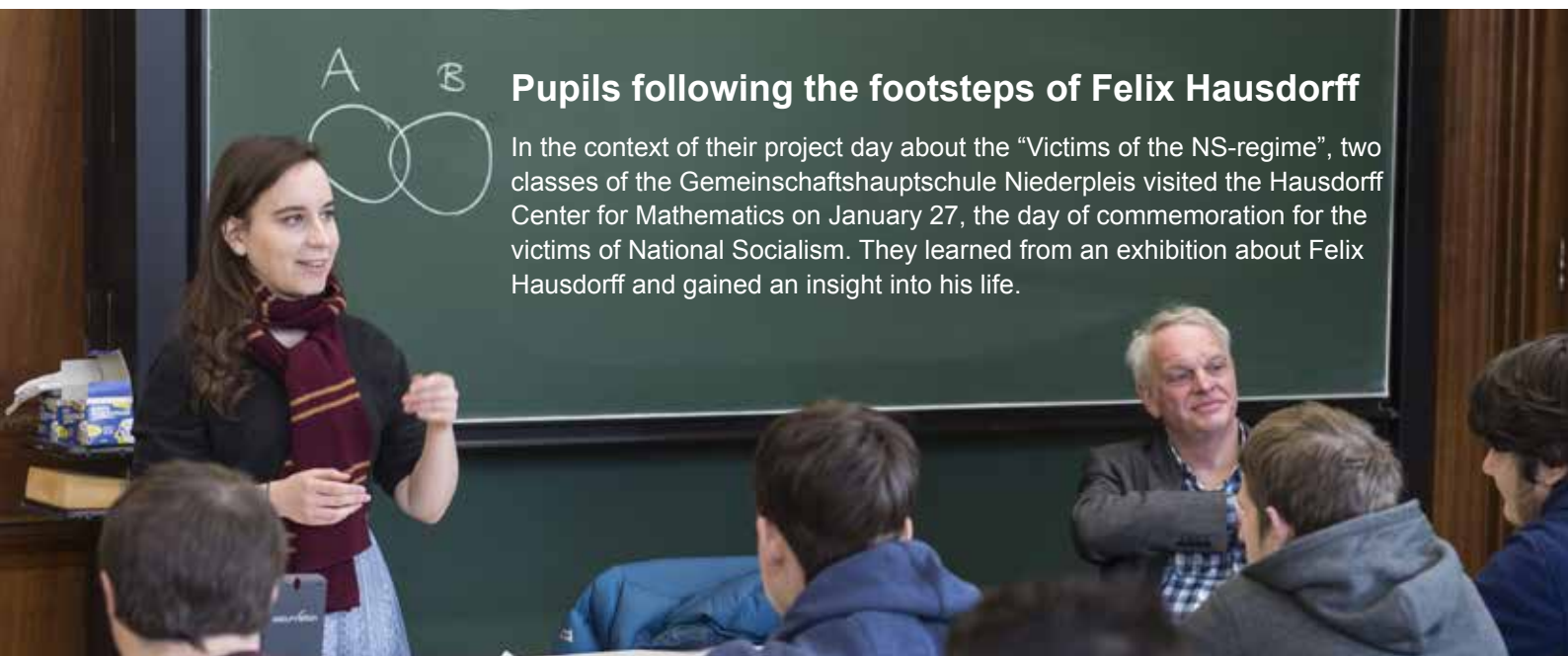
**Further information (in German) is available [here](#).**



## HAUSDORFF EVENTS

## Colloquium in commemoration of Felix Hausdorff

On January 27, the Hausdorff Center for Mathematics held a colloquium in commemoration of the 75th anniversary of the death of the renowned mathematician, philosopher and man of letters Felix Hausdorff at the Center for Mathematics in Bonn. After an introduction about the life of Felix Hausdorff and his family by Prof. Peter Koepke, Prof. Sy D. Friedman from the Kurt Gödel Research Center in Vienna spoke in honor of Hausdorff, who established topology as an independent discipline of mathematics with his masterpiece "Basic Principles of Set Theory", about the current state of the fundamentals of set theory. The violinist Vanessa Vromans provided musical accompaniment for the event. Furthermore, there was a small exhibition about Felix Hausdorff open to the guests.



## Pupils following the footsteps of Felix Hausdorff

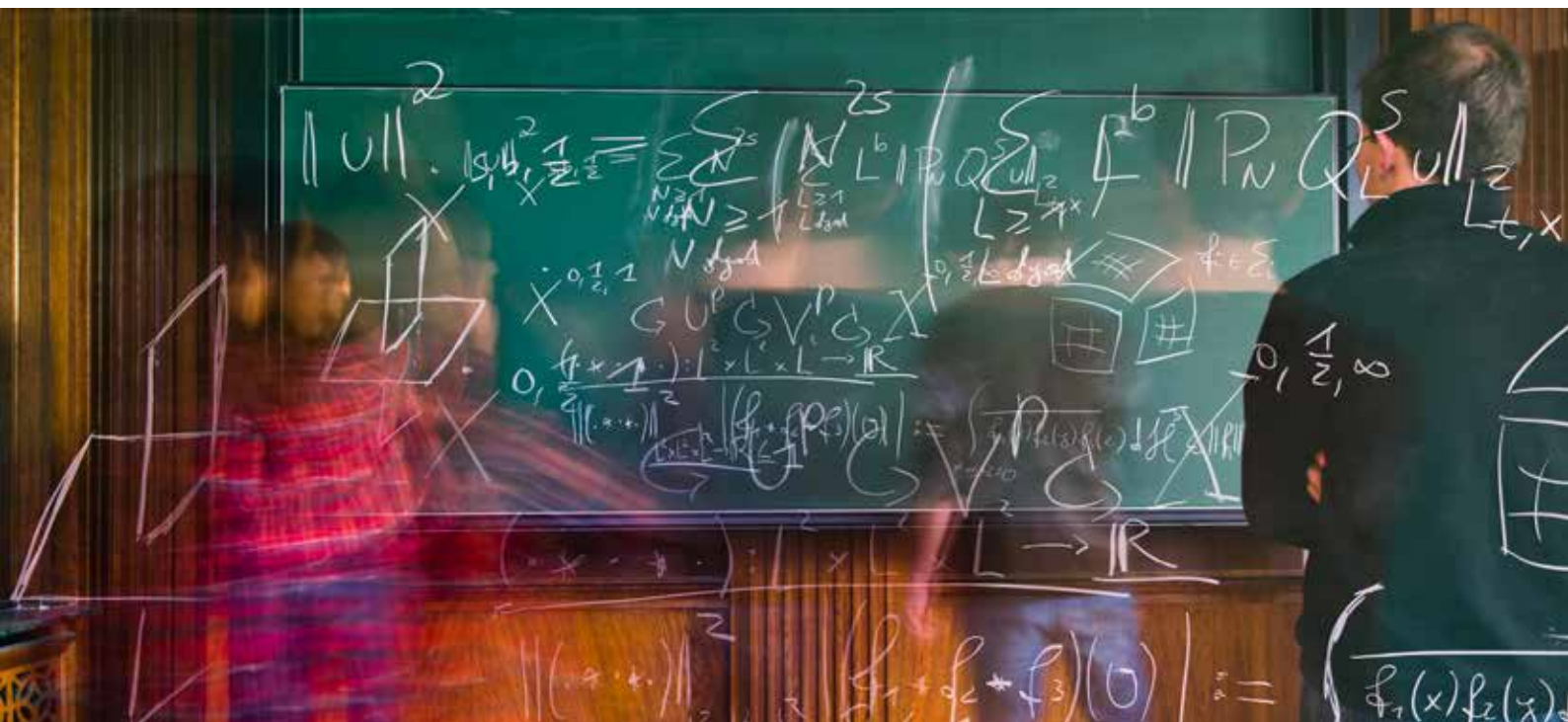
In the context of their project day about the "Victims of the NS-regime", two classes of the Gemeinschaftshauptschule Niederpleis visited the Hausdorff Center for Mathematics on January 27, the day of commemoration for the victims of National Socialism. They learned from an exhibition about Felix Hausdorff and gained an insight into his life.

## Hausdorff School: Recent Development in Singular Stochastic PDEs

The Hausdorff School "Recent Development in Singular Stochastic PDEs" organized by Prof. Massimiliano Gubinelli (Bonn) and Prof. Hendrik Weber (Warwick) took place from February 20 to 24. For five days, the numerous participants exchanged ideas about recent developments in the field of singular stochastic PDEs and in particular about Hairer's groundbreaking work on regularity structures. Moreover, they had the opportunity to acquire hands-on experience working with regularity structures in interactive exercise sessions.



## HAUSDORFF CALENDER



### Multiscale Problems: Algorithms, Numerical Analysis and Computation

Hausdorff Trimester Program

**January 3 to April 21**

### Workshop on Non-local Material Models and Concurrent Multiscale Methods

Hausdorff Trimester Program Activity

**April 3 to April 7**

### Large random graphs: geometry and applications

Hausdorff School

**April 3 to April 7**

### Young Women in Geometry

**April 3 to April 5**

### Applied and Computational Algebraic Topology (Part I)

Hausdorff Trimester Program

**April 24 to May 6**

### Spring School on Applied and Computational Algebraic Topology

Hausdorff Trimester Program Activity

**April 24 to April 28**

### Girls' Day 2017: Mehr als Zahlen

**April 27, 09:00 am to 03:00 pm**

### Conference on Applied and Computational Algebraic Topology

Hausdorff Trimester Program Activity

**May 2 to May 6**

### K-Theory and Related Fields

Hausdorff Trimester Program

**May 8 to August 31**

### Mathematischer Salon

**May 11, 8:00 pm to 10:00 pm**

### Workshop: K-theory in algebraic geometry and number theory

Hausdorff Trimester Program Activity

**May 15 to May 19**

### HCM Workshop: Nonsmooth Optimization and its Applications

**May 15 to May 19**

### Derived Noncommutative Geometry

Hausdorff School

**May 29 to June 2**

### Summer School on K-Theory and Related Fields

(Hausdorff Trimester Program Activity)

**June 19 to June 23**

### Workshop: K-theory and related fields

Hausdorff Trimester Program Activity

**June 26 to June 30**

### Random Constraint Satisfaction

Hausdorff School

**July 17 to July 21**



## HAUSDORFF MIXED



## Bonn mathematics ranked 41th worldwide

*Extract of press release of the University of Bonn from March 8, 2017*

The University of Bonn has received very good rankings in many subjects in the QS World University Ranking by Subject published on March 8. In 20 of 46 subjects examined, Bonn's disciplines rank among the world's top universities, according to QS. The evaluation results of over 4,000 universities were included in the ranking.

The Bonn mathematics placed best in the present ranking with 41th place of all universities and by far the best placed university in Germany. In physics/astronomy, the University of Bonn ranks among the TOP 100 in the world and the TOP

10 German universities. In economics, Bonn, Mannheim, and LMU Munich are the only German universities in the TOP 100 in the world. Computer science ranks in the group 151-200, i.e. among the top 200 worldwide.

Methodologically, the ranking is based on polls among scientists and employers as well as on the number of citations per scientific publication in the relevant subject area.

[Read here the university's press release.](#)

### IMPRESSUM

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