



hem NEWS 4/2016









HAUSDORFF SPECIALS

Daniel Tataru comes to Bonn funded by the Humboldt Research Award

Press release of the University of Bonn from June 8, 2016

The Romanian-American mathematician will be a guest of Prof. Dr. Herbert Koch from the University of Bonn.

Prof. Dr. Daniel Tataru from the University of California, Berkeley in the USA will visit the University of Bonn several times funded by a Humboldt Research Award. Together with Prof. Dr. Herbert Koch, he will seek to advance the research in his area of expertise, generalized wave equations. The prize is endowed with 60,000 euro.

Daniel Tataru is considered an exceptional mathematician. He was born in 1967 in Romania and grew up there. As a schoolboy, he won the first prize in the National Mathematics Olympiad three times and twice in the International Mathematical Olympiad. For his diploma thesis at the University of lasi, he was awarded a prize from the Romanian Academy of Sciences. In 1992, he received his PhD from the University of Virginia (USA). Afterwards, he was a professor at Northwestern University. Since 2001, he has worked at the University of California, Berkeley (USA).

"Prof. Tataru has an exceptional international reputation for his research in the area of nonlinear wave equations", says his host Prof. Koch from the University of Bonn, who nominated the top researcher for the Humboldt Research Award. Both scientists together want to advance the research in this area with the 60,000 euro endowed prize.

Both researchers have been working together for years. The mathematician from the University of California,



Berkeley has already been working together with Prof. Koch for years. Several times, he was a guest at the University of Bonn. "The experiences have been positive without exception", says Prof. Tataru. "That is why I am looking forward to a longer stay in Bonn, so that we can advance our common research plans."

Next year, Prof. Tataru wants to come to Bonn for a short-term visit and in 2018 for a visit of about six months. Both researchers want to obtain a better understanding of long-term dynamics of flowing liquids, in particular of the development of water waves. "Our work has a strong relevance to practical applications in fluid dynamics", reported Prof. Tataru.

HAUSDORFF SPECIALS



EMS Prizes for HCM members Geordie Williamson and Peter Scholze

July 18, 2016

Hausdorff Chair Peter Scholze and HCM member Geordie Williamson (MPIM) both receive the EMS Prize 2016.

Geordie Williamson and Peter Scholze received an EMS Prize for outstanding young researchers each today in Berlin. The prize is awarded every four years to the ten most promising young mathematicians. This award is especially prestigious as "one of each six was subsequently awarded the Fields Medal," said Prof. Pavel Exner, the President of the European Mathematical Society (EMS).

Geordie Williamson is an Advanced Researcher at the Max Planck Institute for Mathematics in Bonn since 2011. The Clay Research Award was awarded to him earlier this year. Peter Scholze became a Hausdorff Chair in 2012 at the age of only 24 years. He already received the Clay Research Award in 2014 and the Leibniz Prize this year.

"I feel much honored and thank the EMS for this award. I'd also like to thank my wonderful colleagues at the Hausdorff Center for their support and the University of Bonn for the inspirational atmosphere that I may work in," says Peter Scholze.

Another of the ten EMS Prizes went to Guido De Philippis, a former HCM postdoc.





Prof. Dr. Michael Ortiz strengthens the Hausdorff Center as a Bonn Research Chair

Press release of the University of Bonn from July 29, 2016

Research Chair will be will be a part-time position.

Prof. Dr. Michael Ortiz joins the Hausdorff Center for Mathematics at the University of Bonn as a new Research Chair – an international recruitment at the highest level. It was possible to recruit the engineer not least because of a flexible, "intercontinental" schedule agreement: Professor Ortiz will spend half of his time in Bonn and the other half with his previous employer, the Caltech Institute in Pasadena/USA.

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HAUSDORFF SPECIALS

"We are proud to welcome Michael Ortiz as a new colleague at the Hausdorff Center. The fact that we could attract such an outstanding, worldwide leading scientist to join us is a huge success for our excellence cluster in mathematics, for the University of Bonn, and for the German scientific community" says Karl-Theodor Sturm, director of the Hausdorff Center.

The new Bonn Research Chair is financed with money from the excellence initiative and emphasizes the importance of interdisciplinary and international cooperation for the Hausdorff Center and the University of Bonn. "Bonn is among the most attractive places worldwide for researchers in mathematics and its applications – but without the extra impact of the excellence initiative we would not be able to get someone like Ortiz," states Karl-Theodor Sturm.

Michael Ortiz is currently Frank and Ora-Lee Marble Professor of Aeronautics and Mechanical Engineering at the California Institute of Technology and will split his time between Caltech and Bonn from September on.

In his research, he focuses on solid mechanics, a field that connects physics, computational mechanics, engineering, and applied mathematics. "Solid mechanicians act as a bridge between fundamental science and industry. Our research and our papers are always application-driven," he explains about his research field. Michael Ortiz received the Timoshenko Medal in 2015, which is widely regarded as the highest international award in applied mechanics. "In Bonn, I am very much looking forward to working with world-class mathematicians in bringing outstanding problems from the physical sciences and engineering to mathematics," he says. "Having Michael Ortiz within the team now is another manifestation of the crucial role of mathematics for nowadays development of scientific and technological progress" comments Karl-Theodor Sturm on the announcement of the new chair.

HAUSDORFF PEOPLE



Ana Caraiani is a new Bonn Junior Fellow since August 1 and joined the Arithmetic Algebraic Geometry group. She is interested in classical and p-adic Langlands programs, Shimura varieties, and arithmetic geometry. Before coming to Bonn, she was a Veblen Research Instructor and NSF Postdoctoral Fellow at Princeton University and Institute for Advanced Study.



Emanuele Dotto joined the Hausdorff Center as a new HCM postdoc on August 1. He is working with Stefan Schwede. His research focuses on developing methods in equivariant homotopy theory and their application to algebraic and Hermitian K-theory. Before coming to Bonn he was a Moore Instructor at the MIT.



In September, Markus
Bachmayr joined the
Hausdorff Center as a
new Bonn Junior Fellow.
His main research area is
the numerical analysis of
high-dimensional problems.
Previously, he worked at
RWTH Aachen, TU Berlin
and UPMC Paris 6.



Taiwang Deng is working as a new postdoc with Yichao Tian since September 1. Before, he got his PhD from Paris University 13 under the direction of Pascal Boyer. He works in representation theory of reductive groups over p-adic fields (related subject, Kazhdan Lusztig polynomials, Quiver varieties, etc) and geometry of Shimura varieties. His main interests lie in number theory, especially Langlands Program and algebraic geometry.



Since August, Baris Evren Ugurcan is a new postdoc in the group of Massimiliano Gubinelli. He received his PhD in mathematics from Cornell University. His research interests are in PDE and stochastic processes, and in applications to mathematical physics and statistical mechanics.

HAUSDORFF EVENTS



Poster Exhibition 2016

During the two-day (June 30 to July 1, 2016) poster exhibition of the Bonn International Graduate School of Mathematics, 88 PhD students presented their current research projects. The participants voted the poster of Patrick Müller as the best poster of the event.

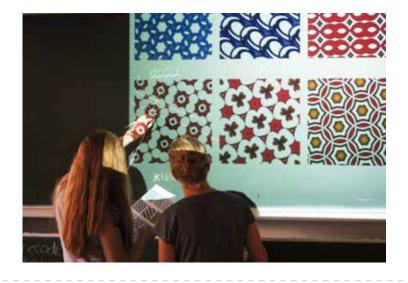
SLAMMER WANTED!

We are still looking for participants who want to be representatives of the HCM at the Excellence Slam on November 3. Apply now to presse@hcm.uni-bonn.de



School Week 2016

At this year's School Week (August 31 to September 3, 2016), about 60 students from year 10 to 13 gained new insights into mathematical studies at the University of Bonn. Rainer Kaenders (University of Bonn), Ysette Weiss (University of Mainz), Mira Schedensack (University of Bonn), Tobias Dyckerhoff (University of Bonn), and Ina Prinz (University of Bonn) gave lectures on how to draw in 3D, rational and real numbers, symmetries, and the evolution of calculating machines from Leibniz to modern computers. Thoralf Räsch's talk about the mathematics program, a meeting with math students and a visit of the Arithmeum topped off the event. This year marks the tenth such School Week so far.



Bonn Mathematics Tournament 2016

On September 23, 54 schools competed during the Bonn Mathematics Tournament. The one-day mathematical contest took place in the Mensa Nassestraße. 54 teams of pupils ran against the team of math teachers and the team of the HCM (Massimiliano Gubinelli, Matthias Erbar, Ngoc Tran, and Simon Buchholz). At the end of the exciting competition the Einhard-Gymnasium from Aachen won the tournament. Michael Kaiser provided entertainment during the afternoon enthusing the audience with his songs about mathematics amongst other things. Additional entertainment came from the premiere of the short movie "conform!" by Alexander Bobenko and Charles Gunn about conformal maps. This year's advanced training for teachers at the Arithmeum was held by Hartmut Müller-Sommer.

HAUSDORFF CALENDER

Topology

(Junior Hausdorff Trimester Program)

September 5 to December 22

Workshop: New directions in L2-invariants

(Junior Hausdorff Trimester Program Activity)

October 4 to 7

Young Women in Probability and Analysis

October 6 to 8

Conference: Configuration Spaces and Moduli Spaces in Homotopy Theory

A conference on the occasion of

Carl-Friedrich Bödigheimer's 60th birthday

October 20 to 21

Workshop: The Farrell-Jones conjecture

(Junior Hausdorff Trimester Program Activity)

October 24 to 28

Cannons at Sparrows. Hirzebruch Lecture 2016

Günter Ziegler (FU Berlin)

November 2, 6:30 to 7:30 pm

Excellence Slam at the cafe unique

November 3, 7:00 to 9:00 pm

Felix Klein Lectures:

Around topological Hochschild homology

Lars Hesselholt (Kopenhagen/Nagoya)

November 7 to 18

Workshop: (Hermitian) K-theory and trace methods

(Junior Hausdorff Trimester Program Activity)

November 7 to 11

Mathematischer Salon

Winfried Scharlau (Essay in German) & Benjamin Himpel (tenor and soprano saxophone, bass clarinet) & Simon Eskildsen (piano)

November 17, 8:00 to 10:00 pm

Workshop:

Fusion systems and equivariant algebraic topology

(Junior Hausdorff Trimester Program Activity)

November 21 to 24

Young Women in Harmonic Analysis and PDE

December 2 to 4

Plücker Lecture 2016

Maria Chudnovsky (Princeton University)

December 5 to 6

HAUSDORFF MIXED

Find out more in our intranet In addition to the usual forms, you can now also find all of our logos, informative material, forms for letters, posters, and presentations, as well as pictures of our buildings in the "members only" area of our website.

IMPRESSUM

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