Catharina Stroppel receives Leibniz Prize

In recognition of her excellent research work, Catharina Stroppel received the Gottfried Wilhelm Leibniz Prize, which is endowed with 2.5 million euros. She is honored with the award for her outstanding work in representation theory, in particular in connection with category theory.

"It's a great honor for me. I am pleased about this recognition of my research, which at the same time represents an acknowledgment of the exciting developments in recent years in the field of representation theory," says Catharina Stroppel. "For me, the prize lays down a challenge for the future." The mathematician wants to use the prize money to make significant advances in research. She also feels it is important to get early-career resear-

chers in particular involved in the fascinating developments under way in research. "For me, mathematics in Bonn, with its excellent researchers and highly motivated students, is a wonderful place to do just that."

Catharina Stroppel is being honored for her excellent work in representation theory, especially in the area of category theory. Representation theory is the mathematical field concerned with symmetries and their various realizations. Symmetries are of central importance both in nature and in mathematics; in physics, for example, the structure of crystals. In her research in representation theory, Stroppel bridges a variety of connections, including knot theory and low-dimensional topology. Representation theory describes abstract algebraic or geometric objects by representing them as linear transformations on vector spaces. She examines categories of modules for these abstract objects.

The theory arose naturally in an attempt to generalize group operations on sets. Nowadays, representation theory plays a role in almost all areas of mathematics, but especially in group theory, algebra, number theory, topology and analysis, as well as in theoretical physics.

Catharina Stroppel studied mathematics and theology at the University of Freiburg, where she received her doctorate in mathematics. As a postdoc she did research in Leicester, Aarhus and Glasgow. She has been a professor of mathematics at the University of Bonn since 2008, Deputy Director of the BIGS since 2014 with some interruptions, and a member of the University Senate since 2019. Catharina Stroppel has also held visiting professorships at universities including Chicago and Princeton. She received one of the rare

invitations to give a plenary lecture at the International Congress of Mathematicians in 2022.

In addition to Catharina Stroppel, nine other researchers – three women and six men – are awarded the Leibniz Prize. The program aims to expand the opportunities available to top-level researchers, relieve some of the administrative burden on them and make it easier for them to employ particularly highly skilled researchers who are at an earlier stage of their career. The € 2.5 million Leibniz Prizes will be presented at a ceremony in Berlin on March 15, 2023.

Lucas Mann receives the Hausdorff Memorial Award

The Department of Mathematics (Fachgruppe Mathematik) honored Lucas Mann for the best dissertation for the academic year 2021/2022 in mathematics with the Hausdorff Memorial Prize. The honor was presented by the chair of the Department, Anton Bovier, between the two Hausdorff Colloquium lectures in the Lipschitz Hall.

Lucas Mann's PhD thesis deals with a fundamental property of compact manifolds, called Poincaré duality, and attempts to apply it to p-adic geometry. In algebraic topology, the Poincaré duality theorem is an important result and it makes a statement about the isomorphism between groups of cohomology and homology of an orientable manifold. The aim of the thesis supervised by Peter Scholze was to formulate and to prove this Poincaré duality theorem in a meaningful way for certain spaces over fields of mixed characteristic with arbitrary coefficients. Starting from this aim, however, Lucas Mann developed much more: a complete theory on almost 300 pages, from which the desired Poincaré duality theorem then follows naturally, quasi as a by-product. Lucas Mann uses the whole range of technically highly sophisticated, latest state-of-the-art mathematical developments, such as higher topos theory, perfectoid spaces and condensed mathematics. In addition, concepts that are intuitively difficult to access are introduced and motivated with great didactic skill. The thesis impresses with elegance and clarity. Peter Scholze is highly impressed by the technical level and the importance

of the theses beyond the statement to be proved: "This PhD thesis is an extraordinary contribution to p-adic geometry, and it will take some years to digest the statements from this thesis."

The Hausdorff Memorial Prize is awarded in honor of Felix Hausdorff each year around the anniversary of his death, January 26, at the Hausdorff Colloquium. Professors and lecturers have the right to nominate candidates. The decision is made by a jury appointed by the Department of Mathematics. The prize consists of 500 euros in prize money and a book prize.

Michael Rapoport receives the Alexanderson Award 2022

The recipients of this year's Alexanderson Award are Jan Bruinier, Benjamin Howard, Stephen S. Kudla, Michael Rapoport, and Tonghai Yang for their paper "Modularity of generating series of divisors on unitary Shimura varieties" published in two parts as a monograph in 2020 in volume 421 of the series Astérisque published by the Société Mathématique de France.

The main breakthrough of the corresponding AIM SQuaRE project was a proof of the modularity of the generating series for some special classes of algebraic cycles and resulting in important links between arithmetic geometry and analysis.

The American Institute of Mathematics (AIM) announces the Alexanderson Award annually. The Award is given in honor of Gerald Alexanderson, Professor of Mathematics at Santa Clara University and founding chair of AIM's Board of Trustees, and recognizes outstanding research articles arising from AIM research activities that have been published within the past three years.

On January 4th, all five recipients were honored at the Prize Session of the 2023 Joint Mathematics Meetings in Boston. Michael Rapoport is the second HCM member to win the

Alexanderson Award. In 2018, Patrik Ferrari was among its first recipients.

Michael Rapoport is professor of arithmetic algebraic geometry in Bonn since 2003. While he is meanwhile emeritus, he is still very active. He became known for his work on Shimura varieties and the proof of the Langlands conjecture for local function fields. Among his doctoral students is Peter Scholze. Michael Rapoport has received numerous prestigious awards, including the Leibniz Prize, and he was an Invited Speaker at the ICM 1994.

Daniel Huybrechts wins the Compositio Prize

Daniel Huybrechts receives the Compositio Prize for 2017-2019 for his article "The K3 category of a cubic fourfold" (Compositio Mathematica, Volume 153, Issue 3 (2017)). Another Compositio Prize was awarded to Colin J. Bushnell and Guy Henniart for the article "Local Langlands correspondence and ramification for Carayol representations".

The article "The K3 category of a cubic fourfold" by Daniel Huybrechts establishes a collection of important results about Kuznetsov components of smooth cubic fourfolds. The Kuznetsov component is a subcategory of the derived category. Huybrechts proves that for a smooth cubic fourfold X, there are only finitely many isomorphism classes of fourfolds whose Kuznetsov component is Fourie-Mukai equivalent to that of X, and only one such class when X is very general. It also gives a criterion for the Kuznetsov component to be equivalent to the derived category of a twisted K3 surface. This influential article should pave the way to solving the mysterious rationality problem for cubic fourfolds.

The Compositio Prize is a prize awarded every third year by the Foundation Compositio Mathematica in recognition of an outstanding piece of mathematical research that is published in the journal Compositio Mathematica during a three year period (n-4, n-3, n-2) starting four years before the year (n) in which the prize is awarded. The prize consists of a model of an algebraic surface. The first prize was awarded in the autumn of 2009.
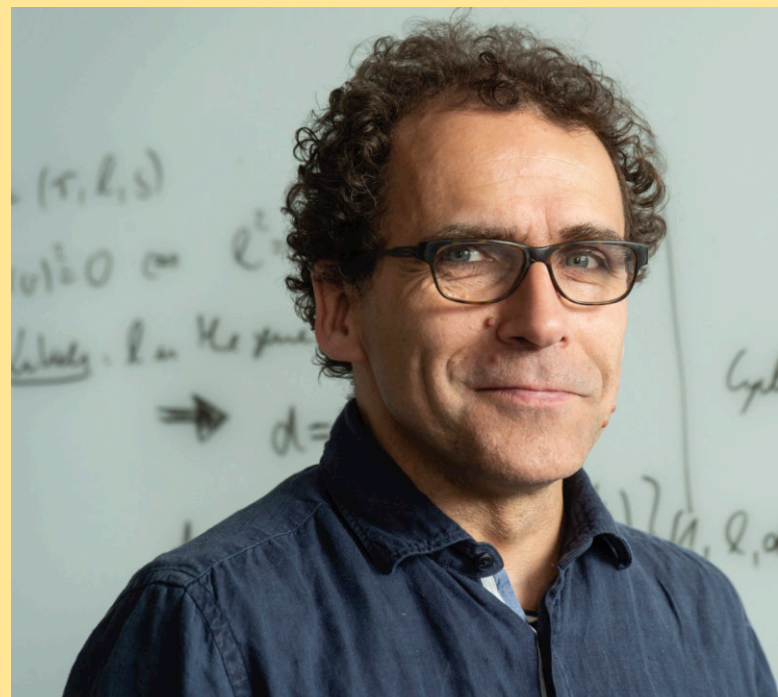
Another honor for Vera Traub – winner of the Richard Rado Award 2022

Vera Traub, junior professor from the Research Institute for Discrete Mathematics, is currently without a doubt one of the shooting stars of her research field worldwide: Shortly after winning the prestigious Maryam Mirzakhani New Frontiers Prize of the Breakthrough Prize Foundation, she has now also been awarded the Richard Rado Prize 2022 by the Discrete Mathematics Section of the German Mathematical Society.

The Richard Rado Prize has been awarded every two years since 1998 by the Discrete Mathematics Section of the German Mathematical Society for outstanding dissertations in discrete mathematics. The prize is endowed with 1000 Euro. The decision about the award is always in the hands of a renowned foreign mathematician, this year in the hands of Jesús A. De Loera from the University of Calfornia. In 2020, the prize was won by Lisa Sauermann, who also studied at the University of Bonn.

Richard Rado (1906-1989) was one of the most important discrete mathematicians of our century. His dissertation "Studies in Combinatorics," which he completed under the guidance of Issai Schur in Berlin in 1931, is a mathematical gem that has lost none of its scientific relevance to this day. In the course of his life, he made fundamental contributions to order theory, matroid theory, graph theory and Ramsey theory, to name only a few subfields of discrete mathematics.

Vera Traub was recently appointed to the University of Bonn, as a junior professor at the Research Institute for Discrete Mathematics, and she is a member of the HCM. Previously, she was a postdoctoral researcher in Rico Zenklusen's group at ETH Zurich. Vera Traub completed her dissertation in 2020 under the supervision of Jens Vygen at the Research Institute for Discrete Mathematics and she received prestigious awards for it (the Hausdorff Memorial Prize, the EATCS

Distinguished Dissertation Award, and recently the Maryam Mirzakhani New Frontiers Prize of the Breakthrough Prize Foundation). In her PhD thesis, Vera Traub made important breakthroughs on open questions of the Traveling Salesman Problem (TSP). Subsequently, she achieved fundamental advances in network design. The TSP and network design are among the most prominent problems in combinatorial optimization.

Rajula Srivastava wins the AWM Dissertation Prize 2023

Together with Jia Shi (C.L.E. Moore Instructor at MIT) and María Soria-Carro (Hill Assistant Professor at Rutgers University), Rajula Srivastava, a Bonn Hirzebruch Research Instructor, is the recipient of the seventh annual Dissertation Prize of the Association for Women in Mathematics. The prize will be awarded during the Joint Prize Session at the 2023 Joint Mathematics Meeting (JMM) in Boston, Massachusetts.

In January 2016 the Executive Committee of the Association for Women in Mathematics established the AWM Dissertation Prize, an annual award for up to three outstanding PhD dissertations presented by female mathematical scientists and defended during the 24 months preceding the deliberations for the award. The award is intended to be based entirely on the dissertation itself, not on other work of the individual.

The Association for Women in Mathematics (AWM) is a non-profit organization. The AWM currently has more than 3500 members representing a broad spectrum of the mathematical community. Since its founding in 1971 by a small but passionate group of women mathematicians, the AWM has grown into a leading society for women in the mathematical sciences, and is one of the societies comprising the Conference Board of the Mathematical Sciences.

Rajula Srivastava received her Ph.D. from University of Wisconsin, Madison in 2022, under the supervision of Andreas Seeger. She is currently a Hirzebruch Research Instructor at the Hausdorff Center for Mathematics, University of Bonn, and the Max Planck Institute for Mathematics. Rajula Srivastava's research is in harmonic analysis. Her dissertation, "Three Topics in Harmonic Analysis: Maximal Functions on Heisenberg Groups, Cotlar-type Theorems and Wavelets on Sobolev Spaces", as the title suggests, covers a broad range of topics. Two of the chapters address the problem of establishing optimal Lebesgue space estimates for local maximal averaging operators on Heisenberg groups. In another chapter, Rajula determines the range of smoothness of Sobolev spaces for which there exists an unconditional basis of orthonormal spline wavelets of a given order. In yet another part of the dissertation she provides Lp bounds for a Cotlar-type maximal operator under minimal smoothness assumptions. The results have led to four publications in research journals, three of which are single-authored.

Karl-Theodor Sturm new member of the Academia Europaea

The former HCM spokesperson Karl-Theodor Sturm has been elected to the Academia Europaea.

The Academia Europaea (formed in 1988) is the pan-European academy with a membership of over 4000 eminent scholars, drawn from all countries of Europe, and all disciplines, nationalities and geographical locations. The object of Academia Europaea is the advancement and propagation of excellence in scholarship in the humanities, law, the economic, social, and political sciences, mathematics, medicine, and all branches of natural and technological sciences anywhere in the world for the public benefit and for the advancement of the education of the public of all ages. The aim of the Academy is to promote European research, advise governments and international organisations in scientific matters, and further interdisciplinary and international research.

The focus of Karl-Theodor Sturm's research is in Stochastic and Geometric Analysis. In 2016, he was awarded an ERC Advanced Grant for his research project "Metric measure spaces and Ricci curvature – analytic, geometric, and probabilistic challenges". In 2021, he was Plenary Speaker at the 8th European Congress of Mathematics in Portoroz.

# Ada Lovelace Prizes for Karen Petersen and Celina Teke

In the academic year 2021/2022, the Institute for Numerical Simulation (INS) awarded an Ada Lovelace Prize to Karen Petersen for the best master thesis (endowed with 1,000 Euros) and to Celina Teke for the best bachelor thesis (endowed with 500 Euro). Both theses were supervised by Joscha Gedicke. The award was presented today at a cerenomy in front of numerous members and students of the Institute.

Karen Petersen's master thesis is entitled "Adaptive finite element methods for the Jones eigenvalue problem". It deals with the efficient numerical approximation of natural frequencies of elastic bodies. These are used in modelling the oscillating behaviour of elastic bodies, or in answering the question of uniqueness of solutions to coupled problems. The developed adaptive finite element method, which is based on a partition of unity property, is shown to be able to automatically refine the grid locally where the approximation of the solution is most difficult. Karen Petersen demonstrates the superiority of the adaptive finite element method over uniform mesh refinements in interesting numerical experiments.

The bachelor thesis "Finite volumes for the heat conduction equation" of Celina Teke deals with the numerical approxmation of the heat equation. This finds applications in the time-dependent modelling of heat propagation in an object under consideration. The conservation of physical quantities is thereby an important property, which the considered finite volume method fulfils in that everything that flows into one side of a discrete element also flows out of it on the opposite side. The applicability of the considered finite volume method is clearly demonstrated by Celina Teke using the model of a deep freezer where the door is opened and warm air flows in from the outside.

The Ada Lovelace Prize was established in 2010 and has been awarded annually since then. It serves to promote young women in numerics. Outstanding bachelor and master theses as well as dissertations are considered for the award. The prize money ranges from 500 euros for the best bachelor's thesis to 1,000 euros for the best master's thesis and 2,000 euros for the best dissertation by young female scientists at INS.
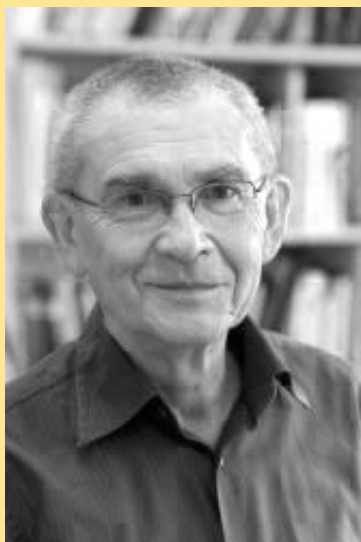
Max Planck Institute for Mathematics Mourns Death of Yuri Manin

The Max Planck Institute for Mathematics and the entire Bonn Math Community mourn the death of Yuri Ivanovich Manin. The eminent mathematician passed away on Saturday, January 7, at the age of 85. Yuri Manin was a scientific member and director of the Max Planck Institute for Mathematics from 1992 to 2005, after which he remained an extremely active emeritus director. His work largely influenced the development of modern mathematics

Appointment to Stockholm for Georg Oberdieck

Georg Oberdieck, so far Bonn Junior Fellow, has been appointed as Associate Professor at the KTH Royal Institute of Technology in Stockholm. He has taken up the position on February 1st and will strengthen the group "Algebraic Geometry and Commutative Algebra". We wish Georg Oberdieck all the best in his future career and thank him for the very successful years of excellent research, which was also recognized with the one or the other award.

Welcome to our new Bonn Junior Fellows!

Barbara Verfürth joined the Institute of Numerical Simulation as a W2-Professor and Bonn Junior Fellow in October 2022. She obtained her PhD at University of Münster in 2018 and then joined University of Augsburg for a postdoc. After that, she became a junior research group leader and later junior professor at Karlsruhe Institute of Technology. She received an Emmy-Noether grant by DFG in 2022. Her research interests center around numerical analysis of partial differential equations, in particular multiscale problems. She designs, analyzes and implements new computational multiscale methods for instance for wave-type problems. Barbara Verfürth currently focuses on the development of multiscale methods for nonlinear problems and with time-varying or randomly perturbed coefficients. She combines ideas from finite element methods, problem-adapted multiscale basis, model reduction and analytic homogenization to develop efficient schemes to describe the macroscopic behavior of multiscale solutions.

Johannes Alt joined the Hausdorff Center as a Bonn Junior Fellow in January. He obtained his PhD at the Institute of Science and Technology Austria in 2018. Then he was a post-doc at the University of Geneva from 2018 to 2020. With a Marie Skłodowska-Curie global fellowship, he worked as a postdoc at the Courant Institute of Mathematical Sciences of New York University and at the University of Geneva in 2021 and 2022. His research area lies in random matrix theory, a research field at the intersection of analysis, probability theory and mathematical physics. More precisely, Johannes studies the eigenvalues and eigenvectors of random matrices and random graphs. He is particularly interested in their eigenvalue distributions on mesoscopic scales as well as the structure of their eigenvectors.

HAUSDORFF EVENTS

YAM Symposium

Our Young African Mathematician (YAM) Symposium was a great celebration of our YAM Fellowship Program which allows young, talented and highly motivated African mathematicians to spend a few months immersing themselves in the rich mathematical environment in Bonn. This collaboration with the African Institute for Mathematical Sciences (AIMS) started in 2021, but we did not have the opportunity until last November to come together to appreciate what has been achieved since the inception of the program and to start conversations about how to develop the program in the future.

The Symposium introduced our former and current fellows from different African countries, who presented their research projects during a lively poster session. It also highlighted current mathematical research from Africa in two exciting lectures by Wilfred Ndifon from AIMS South Africa and Mouhamed Moustapha Fall from AIMS Senegal. And, meeting our cooperation partners from AIMS gave us the opportunity to strengthen our connection and to make plans on how to improve the YAM Fellowship Program: From 2023 on, Fellowships will be awarded for two academic semester (or 9 months) This will allow the Fellows to spend their first semester in Bonn taking courses that prepare them for their research projects, on which they will focus during their second semester. The new Fellowship scheme will also allow the Fellows to form a stronger

community during their stay in Bonn and make build connections Bonn mathematicians.

As the founder of the program Franca Hoffmann has left Bonn for CalTech, the YAM Program will now be taken over by a team: Tim Laux will be responsible for the academic questions, and Magdalena Balcerak Jackson will take over the organizational side. Stay tuned: Even more exciting

developments for the YAM program are in the works! A nice side effect of the symposium: The General-Anzeiger conducted an interview with two of the current fellows, which will be published in the next weeks.

Mathematics and Arts

In December, our second colloquium focussing on cultural exchange between mathematics and arts took place. About 40 students from both disciplines, including more than 20 students from the Alanus Hochschule listened to the very exciting lecture by Susanne Spies, Universität Siegen, about the „mathematician as an artist" from a philosophical perspective. Afterwards, we started to think about first joint student projects. Among other things, we plan joint visits to exhibitions with viewings of pictures from different disciplinary perspectives, a discussion about the role of artificial intelligence in both disciplines, and a comparison of the historical development of both disciplines in terms of stagnation, upheaval, fragmentation, and emancipation. Although this is not a scientific project, but a cultural exchange, we hope to gain numerous insights and broaden the students' horizons.

Popular Plücker Lectures with Johan Commelin and Kevin Buzzard

This years' Plücker lectures dealt with the formalization of mathematics and theorem provers. It was an event with two speakers spread over two weeks, Johan Commelin (Freiburg, soon Utrecht) and Kevin Buzzard (Imperial London) who are maybe the most outstanding figures and driving forces in this topic.

Johan Commelin gave a two-hour introduction on the topic including theorem provers and explicit examples and illustrations in LEAN. The Lipschitz Raum was fully packed with people even standing along the side walls. The speaker engaged the audience in an amazing way and initiated very lively and intense discussions on the material. Commelin was also leading the practical sessions which were offered in the CIP pool on Thursday and Friday. Again, it was hard to even secure a seat for the event. There was so much interest that an extra session was even offered on Saturday.

Interactive theorem proving software can check, manipulate, and generate proofs of mathematical statements, just as computer algebra software can manipulate numbers, polynomials, and matrices. Over the last few years, these systems have become highly sophisticated, and have learned a large amount of mathematics. One has to be open to the idea that these systems will change the way mathematics is done, and how it is taught in universities. A breakthrough result, the Liquid Tensor Experiment, shows that LEAN already forms cutting-edge research in a crucial way.

The influence of formalizing mathematics and proofs in fundamental basic mathematics as well as deep modern developments became very transparent in Kevin Buzzard's two lectures.

He very clearly explained the role and meaning of computer assisted proofs, proof checkers, artificial intelligence and the role of (research) mathematicians in all this. He presented many amazing and at the same time surprising and even confusing examples touching many fields of mathematics. The Plücker Raum was even too small to fit everybody in. Therefore, the talks were additionally streamed to a seminar room.

The very lively discussions went on during the reception. There was always a cluster of people around the speaker trying to get as many as possible answers to all the questions which came up. It did not even matter that the food was gone very quickly...

Where will the journey of formalization in mathematics take us in the future? We can't really tell. But it seems clear that we have an exciting trip ahead with many new insights and results and even a new way to see traditional mathematics!

Who is the Ally Day for?

All students and friends were invited to the Ally Day on November 25. Not all of them joined, but quite a few attended. They listened to short and very personal talks about gender discrimination, mental health and imposter syndrome followed by discussion in groups. The discussion in the group on gender discrimination was hesitant at first, but developed into a very open conversation. Many of the issues raised were purely practical: Who do I turn to, if someone discriminates against me? Who will believe me? What is the point of it all? What can I do, if I see someone being discriminated against? Later, the reconvened large group continued to talk frankly over tea for a long time, not missing out on the humorous side.It became clear that the exchange is important - not only to answer questions, but also to realize that no one affected is alone with their problem and to see to it, that no one is left alone. The Ally Day is important. For those affected, for those who want to help, and perhaps also for those who think that these problems do not exist in Bonn. Because only what is acknowledged can be improved. And for that, everyone is needed.

Bonn Maths Club: Germany's first participation in an international Maths Olympiad for primary school children

This winter, for the very first time, Germany took part in a math Olympiad for elementary schools. How did this happen? Every Saturday, around 40 elementary school children from Bonn and the surrounding area take part at the on-site Bonn Math Cub, and, in addition, many children visit the still up and running online Math Club. In total, approximately 100 (!) children and young people take part in our wide range of activities every Saturday. We took the constant interest in the elementary school in-person course as an opportunity to think about joint participation in mathematical competitions and to inform ourselves about appropriate opportunities for the elementary school sector. Since Kazakh colleagues have many years of experience in the field of multilingualism and translanguaging in education and in supporting particularly interested children and young people, we turned to Almaz Kungozhin from Almaty. He runs a special school for mathematics and physics with a boarding school in Almaty and has been successfully training children and young people for the International Mathematics Olympiad for many years. He recommended Fizmat Elementary Math Olympiad (FEMO) to us and helped us to establish a contact with the organizing team of the Olympiad in Astana, consisting of Asset Altybaev and Indira Bulekbae-va.

Assylbek Olzhabaev, who works as a tutor in the Bonn Math Club, translated the problems into German for us, and Svetlana Nordheimer organized the Olympiad with the active support of Nik Oster, Jacky Jansen, Pauline Barth and Nour El Samad. There was more to do than at a usual Math Olympiad! Not only did the children need to be supervised, but some of them - especially the First Graders - also needed help reading the math problems. Most of the children who took part in FEMO this year in Bonn initially just wanted to take part for

fun, but 8 children wanted an evaluation of their results from Kazakhstan. We are especially proud of Johannes Reismann (4th grade), who won a second place. Johannes has been attending the in-person course of the Bonn Math Club from the very beginning.

The next round will take place in April, and we hope to be there again! Here is an actual FEMO problem for 1st grade in Kazakh and English:

> Бір парақ 10 бөлікке кесілді. Содан кейін осы бөліктердің біреуі 9 бөлікке кесілді. Содан кейін алынған бөліктердің біреуі 8 бөліккке кесілді. Нәтижесінде қанша бөлік алынды?
>
> A sheet of paper was cut into 10 pieces. One of these 10 pieces was cut into 9 pieces again. One of these 9 pieces was then cut into 8 pieces again. How many pieces were created in total?
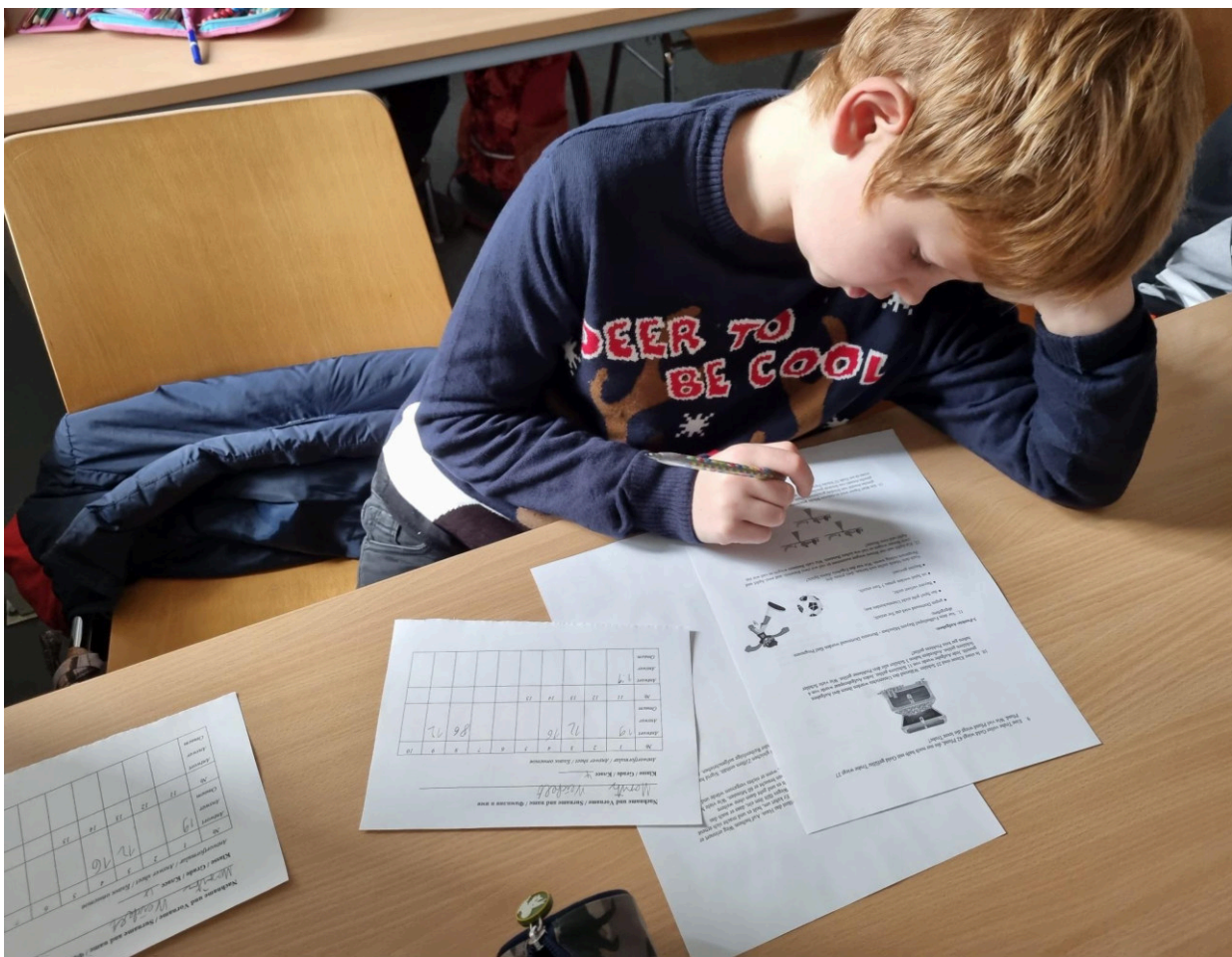
Contribution to condensed mathematics in the "Spektrum der Wissenschaft"

Last year, Manon Bischoff, theoretical physicist and science journalist for "Spektrum der Wissenschaft", visited us and subsequently wrote an article that was published in the January issue. The introduction to the article is a description of the hybrid and unorthodox lecture format for the lecture "Condensed Mathematics and Complex Geometry", in which Peter Scholze and Dustin Clausen alternately lectured from Bonn and Copenhagen during the last summer semester. Sometimes they developed the exact topics only shortly before or even during the lecture. A description of the main ideas of condensed mathematics has been excellently achieved by Manon Bischoff. It is definitely a worthwhile read.

Comic series Hanna, Claira + Mathis

Hanna, Claire and Mathis (HCM) were created and drawn by Daniela Schmidt. The cartoon strip will now delight us irregularly with puns and smaller jokes about mathematics.

Every Advent Sunday and on Christmas Eve itself, we posted a comic on our social networks. The comic with the "perfectoid gift" was particularly well received. We will continue the series occasionally, diving into non-Christmassy topics as well!
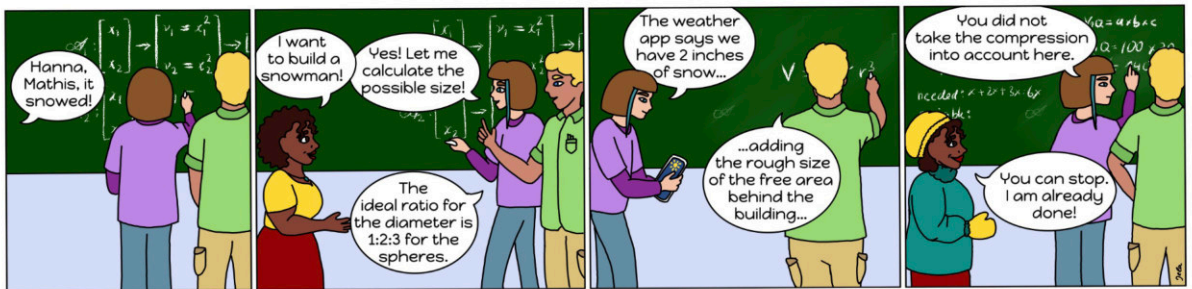
Hanna, Clair∈ + Mαthis

Hanna, Clair∈ + Mαthis

Hanna, Clair∈ + Mαthis

Hanna, Clair∈ + Mαthis

Neues von der Bonner Mathematischen Gesellschaft

Awarding of the Bachelor Prizes by the BMG

As every year, the Bonner Mathematische Gesellschaft honored the best bachelor theses in mathematics with 200 euros in the context of the Hausdorff Colloquium. Students who have obtained their bachelor's degree by September 30th of the respective year are considered. The awardees are selected on the basis of the available transcripts and, if applicable, the bachelor's thesis.

In the academic year 2021/2022, the following Bachelor graduates were awarded by Rainer Kaenders, the chairman of the Bonner Mathematische Gesellschaft:

- Iris Hebbeker, "Zeta functions of curves with no rational points"
supervisor: Daniel Huybrechts

- Jonas Walter, "Positivity of the Hodge bundle on the moduli space of curves"
supervisor: Peter Scholze

- Maximilian Keßler, "Simplicial homotopy theory and the Kan-Quillen model structure"
supervisor: Tobias Lenz

- Daniel Ebert, "Die LKH-Heuristik für praktische Tourenplanungsprobleme"
supervisor: Jens Vygen

The Bonner Mathematische Gesellschaft (BMG; Bonn Mathematical Society) supports and promotes mathematics at the University of Bonn, for example by organizing events or awarding prizes.

Who has ideas for a Circus Mathematicus?

After the great success of the "Valsche Vorträge Vestival" (VVV), the Bonn Mathematical Society is currently planning a new event which is supposed to present references of mathematics to juggling, magic and other tricks can be presented in a circus format. If anyone has ideas on how she or he can participate or who else could be invited to contribute, please feel free to contact Rainer Kaenders, Thoralf Räsch, Regula Krapf or Stefan Hartmann. The BMG is expanding their offerings. A good reason for all Bonn professors, postdocs, PhD students and students to finally become members! Feel free to contact us.