**Postdoctoral Faculty Essential to Department’s Success**

For nearly 50 years, the department has recruited and hired recent PhD recipients as postdoctoral assistant professors (postdocs). These term-limited appointments began with a few Hildebrandt assistant professors in the mid-1970s. The postdocs were able to gain more experience in teaching, while also having time to establish their research careers working with more senior members of the faculty in the department. After their terms, most of these mathematicians went on to tenure-track positions at universities around the world.

In the mid-1980s, then chair Don Lewis expanded the program, and the department was able to recruit and hire additional three-year postdocs. The number of these new postdocs that joined the department each year varied from a low of around 10 to more than 30, depending on teaching needs. Over the years, several grants and outside funding sources have helped to support and enhance these faculty members. Beginning in 2000, the NSF VIGRE grant provided funding for numerous new postdoctoral positions for several years. NSF RTG grants have funded some of these postdoc faculty beginning in the mid-2000s, and one grant is still active. More recently, some of the postdocs have been supported with funds from private donations. Currently, there are postdoctoral positions named for James Van Loo, Donald J. Lewis, Jack Byrne, and Curtis E. Huntington.

These young faculty are vital to the academic and research environment of the department. Upon arrival, the new postdocs attend a week-long training program to learn the process of teaching in the department. The Michigan Calculus program has been recognized as one of the more successful

**View From the Chair’s Office**

Anthony Bloch

I am pleased to say that the past year has been much more like a normal year at Michigan and in the department in general. It has been wonderful to see so many people in person. There are still zoom meetings, which are indeed sometimes convenient and there are changes and challenges, but hopefully everything will continue to move in a positive direction.

I would like as usual to thank everyone at UM Mathematics for all the effort they put into making our department function so well over this period. I would like to acknowledge in particular the contributions of our Associate Chairs: Andreas Blass, Joe Conlon, Sergey Fomin, Kristen Moore and Dick Canary. In addition I am grateful to Ralf Spatzier, the head of the Personnel Committee, Mattias Jonsson our Doctoral Chair, Stephen DeBacker the head of undergraduate program, Jinho Baik and Kartik Prasanna our current and previous head of admissions, and Silas Alben our head of the Applied and Interdisciplinary Mathematics Program. I would also like to thank everyone else who worked so hard on departmental committees and administration this year and for the department’s dedication in general to teaching and research, including our large and important introductory program.

Our staff, led by Doreen Fussman, provide exceptional support to our faculty and students. Heather Kleber keeps me and other administrative faculty on track. Jessica Randolph leads our student services team. Our other extremely capable staff work hard to keep things running smoothly at the faculty, graduate, and undergraduate levels. Suzanne Rogers is to be commended for her diligent work on all things communication.

In terms of hiring, Dmitry Chelkak (see page 3) joined the faculty this year, and Sarah Peluse will join us from IAS in fall 2023. We also welcomed a new class of postdoctoral assistant professors and a new class of graduate students.

Many of our activities continued to thrive (mainly in person!) including our colloquium under the leadership of Zaher Hani, Wei Ho, and Lizhen Ji, our interdisciplinary Mathematics Program. I would also like to thank everyone else who worked so hard on departmental committees and administration this year and for the department’s dedication in general to teaching and research, including our large and important introductory program.
**Faculty News**

**Professors Jinho Baik, Bhargav Bhatt, Tasho Kaletha, and Aaron Pixton** made presentations at the 2022 International Congress of Mathematicians. Baik, Kaletha, and Pixton gave invited sectional lectures, and Bhatt was a plenary speaker.

**Professor Bhargav Bhatt** received a 2021 Clay Research Award. Presented by the Clay Mathematics Institute, the award recognizes major breakthroughs in mathematical research. Bhatt is cited for his groundbreaking achievements in commutative algebra, arithmetic algebraic geometry, and topology in the p-adic setting. Bhatt also received the Frederic Esser Nemmers Prize in Mathematics from Northwestern University. The biennial prizes recognize top scholars for their lasting significance, outstanding achievements, contributions to knowledge, and the development of significant new modes of analysis. Bhatt is cited for his “revolutionary contributions to algebraic geometry in mixed characteristic through a new synthesis of ideas in topology, algebra, and arithmetic.”

**Professor Lydia Bieri** has been elected a Fellow of the American Physical Society. The number of APS Fellows elected each year is limited to no more than one half of one percent of the membership. It is a prestigious recognition by her peers of her outstanding contributions to physics. The citation on her certificate states: “For fundamental research on general relativity, in particular contributions to understanding of gravitational wave memory.”

**Assistant Professor Charlotte Chan** has been named a recipient of a 2022 Sloan Fellowship, recognizing her work in representation theory. She is one of 118 early-career scholars who have been named Sloan Research Fellows this year.

**Professor Stephen DeBacker**, Arthur F. Thurnau Professor of Mathematics and the Undergraduate Program Director, has received the 2022 Individual Award for Outstanding Contributions to Undergraduate Education, bestowed by the College of Literature, Science, and the Arts. His nomination cites Stephen’s exceptional ability to explain “basic mathematical concepts to broad audiences,” his ability to inspire love for mathematics in students, his work designing math curriculum to favor one-on-one mentoring and small group work instead of extensive lecture content, and his many contributions to inclusion, outreach, and community engagement of the department.

**Professor Trachette Jackson**, Professor of Mathematics and University Diversity and Social Transformation Professor, has been named to a three-year appointment as the University of Michigan’s inaugural Assistant Vice President for Research – Diversity, Equity, and Inclusion Initiatives. She joins the Office of the Vice President for Research, where she will work to promote and support the infusion of DEI principles in all aspects of the university research portfolio.

**Professor Robert Megginson** accepted the U.S. Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring (PAESMEM) on May 25. He accepted the award on behalf of the Mathematical Sciences Research Institute, recognizing MSRI’s diversity, equity, and inclusion efforts over the last thirty years. Megginson played key roles in MSRI’s DEI efforts for three decades. He helped established MSRI’s DEI committee, was a founding member and later chair of the committee, and held various leadership roles for the Institute, including as a Trustee as well as a term as Deputy Director in 2002-04 while on leave from UM.

**Notes from the Chair (continued from page 1)**

Our faculty continued to accrue many honors including grants from the NSF and other agencies. Some of their achievements are detailed on page 2. Our alum June Huh received the 2022 Arthur F. Thurnau Professor of Mathematics, His research interests include complex analysis, probability, and mathematical physics.

After attending St. Petersburg University for undergraduate studies, Professor Chelkak received his PhD from the St. Petersburg Department of Skoltech Mathematical Institute of Russian Academy of Sciences (PDMSI RAS) in 2003. He was an associate professor and senior researcher at St. Petersburg University until 2014. Professor Chelkak held visiting positions at the University of Geneva in 2014-2016, and worked at Ecole Normale Superieure, Paris, in 2016-2022. Professor Chelkak’s recent research involves two-dimensional lattice models at and near the critical point. Notably, he studied the Ising models of statistical mechanics, in which he showed universality and conformal invariance at criticality with Fields medalist Stanislav Smirnov. He also did research on spectral theory of one-dimensional differential operators.

**Professor Thach Chelkak** joined the department in September 2022 as the M.S. Keeler Professor of Mathematics. His research interests include complex analysis, probability, and mathematical physics.

**Research Profile: Danny Forger**

The research of Professor Daniel Forger uses mathematics, modeling, and simulations to understand problems in biology and medicine. He applies mathematical techniques from dynamical systems, numerical methods, and machine learning to simulate and analyze large-scale models, often using graphics processing units. Forger studies the mathematics of physiological factors which affect human performance such as sleep, proper timing by our internal (circadian) clock, and mood regulation. The data and information he and his colleagues collected and analyzed led to the creation of a tool used by hundreds of thousands of travelers that helps to ease recovery from jet lag (the ENTRAIN app). He has analyzed the sleep and circadian patterns of medical interns to shed light on how physiology, e.g., neuropeptide regulation, the electrical activity of neurons, and cellular biochemistry, affects human performance.

Forger has investigated mood disorders and their relation to circadian rhythms. In 2020, he utilized an app to help analyze the impact of social distancing and the pandemic lockdown on sleep and circadian timekeeping. The data collected from wearable devices can be helpful to alleviate the consequences of social isolation.

More recently, Forger led a group of researchers who investigated changes in multiple physiological systems during COVID-19 disease progression using information collected by wearable technology. The data indicate that multiple separate physiological features and autocorrelation of heart rate are significantly altered in COVID disease, and can classify symptomatic versus healthy periods. Increased heart rate and autoregulation begin at symptom onset, while the heart rate response to activity increases soon after symptom onset and increases more in individuals experiencing coughing symptoms. This work could allow for future wearables to pre-detected COVID infection.

In a new project, funded with a $6.25M grant from the Multidisciplinary University Research Initiative, Forger leads a team of researchers from the University of Arizona, and Washington State University, to uncover and investigate the underlying neurobiological mechanisms of cognitive fatigue. The focus of the investigation will be to determine how cognitive fatigue, through sleep deprivation and disruption of circadian rhythms, impacts human performance. Use of wearable technology and a mobile app will help to collect data for analysis.

**New Faculty**

Dmitry Chelkak joined the department in September 2022 as the M.S. Keeler Professor of Mathematics. His research interests include complex analysis, probability, and mathematical physics.

**Faculty Promotions**

Zaher Hani was promoted to professor. Alex Wright was promoted to associate professor with tenure. Nina White was promoted to associate research scientist.

**Notes from the Chair (continued from page 1)**

Our faculty continued to accrue many honors including grants from the NSF and other agencies. Some of their achievements are detailed on page 2. Our alum June Huh received the Fields Medal (see page 11).

**The mathematics community in our department continues to be a supportive and exciting place to work and an optimistic that it will continue to be. I know everyone here will work to make this a reality.**
Graduate Program Highlights

The department has been back to in-person instruction and meetings for more than a year. This was especially impactful for our cadre of graduate students. They were able to interact and socialize, collaborate on teaching and research, and form relationships with their colleagues.

In Memoriam

Gene Krause 1937-2022

Professor Emeritus Eugene Krause passed away on July 27, 2022. He was a member of the University of Michigan mathematics faculty from 1963 until his retirement in 2002.

After receiving his bachelor’s and doctorate degrees from the University of Wisconsin, Professor Krause joined the UM Department of Mathematics in 1963 as an instructor. He became a Professor in 1977, and served as Associate Chair for Education, from 1975 to 1979.

Professor Krause began his mathematics research career in the area of algebra but soon migrated toward mathematics education. For more than 20 years Professor Krause managed the mathematics department’s education program. He taught a majority of the department’s teacher education courses, counseled myriad students who went on to teach in elementary and high schools, and demonstrated that it was possible to communicate the complexities and beauty of mathematics to young students. Professor Krause conveyed the art of teaching both in the classroom and through his writing. He wrote eight books, two for middle school (with C. Brumfiel), and six for college, including Introduction to Linear Algebra and Mathematics for Elementary Teachers. He also contributed a number of articles to math-education journals and was considered a top expositor. Professor Krause’s monograph, Taxicab Geometry, was popular with both students and teachers.

During his tenure at UM Professor Krause was a stellar teacher. His courses were quite demanding. His teaching evaluations were simply outstanding, and his commitment to his own teaching and to the teaching profession was evident. His dedication and strong teaching did not go unrecognized by the Panhellenic Association of Michigan as an excellence in Concentration Advising award in 2001, and was the College’s Excellence in Education Award three times, Ex Good Teaching Award; in 1982 he won the Ruth M. Sinclair Award, was popular with both students and teachers.

The PhD program continues its success in attracting strong students, maintaining them in the program, and seeing them through receipt of the degrees. This fall 40 new students were welcomed to the doctoral and masters programs. The success of the recent group of PhD recipients is reflected on page 6. Since 1998, over 80% of the students who begin the program have eventually finished with the PhD.

The Marjorie Lee Browne Scholars (MLB) Program continues to bring students into the program at the masters level, and it is designed to help them transition from undergraduate to PhD level work. It has been successful in attracting students from groups that are underrepresented in mathematics graduate programs, and helping them continue their pursuit of PhD degrees in mathematics. MLB Scholars include students pursuing applied mathematics as well as pure mathematics.

The Quantitative Finance and Risk Management (Quant) program welcomed 40 new students in 2022. The program’s graduates continue to find success in the financial and business domains.

The majority of our graduate students directly benefit from funding established by donors and alumni. The funds are instrumental in attracting and retaining the best and brightest students.

In the fall of 2022, these bonding activities have helped renew the community spirit of the department, and enhance the academic atmosphere for students and faculty alike.

Professor Krause is survived by his wife of 62 years, Jane, their two sons, and numerous grandchildren and extended family members.

2022 Graduate Fellowships & Awards

Allen L. Shields Fellowship
Christina Athanassoulis
G. Cleaves Byers Award
William Dana
Luther Claborn Fellowship
Swanj Pandi
Arthur H. Copeland Memorial Fellowship
Ethan Zell
Wirt and Mary Cornell Prize
Alex Kapiamba
Cameron & John Courtney Scholarship
Quisheng Zhao
E.S. & A.C. Everett Memorial Fund
Jineon Baek
A. V. Flint Memorial Scholarship
Ram Ekstrom
Donald J. Lewis Fellowship
James Hotchkiss
Alice Webber Glover Scholarship
Chuhao Sun
Juha Heinonen Memorial Fellowship
Yili Zhang
Marjorie Lee Browne Scholars
Cyril Cordor
Ram Ekstrom
Jose Esparza Lozano
Saida Fatema
Oscar Gonzalez
Shivani Prabala
Mia Smith

Edwin Wilkinson Miller Award
Ekatetina Shchetkina
National Science Foundation Fellows
Anthony Chen
Shelby Cox
Alana Huzay
Daniel Maes
Carsten Sprunger
Teresa Yu
Carroll V. Newsom Award
Cyril Cordor
Peter Smereka Thesis Award
Rishi Sonthala
Prasad Family Fellowship
Karthik Ganapathy
President’s Challenge
Michael Mueller
Rackham International Student Fellowship
Kashvi Srivastava
Quisheng Zhao
Rackham One-Term Fellows
Jack Carlisle
Ben Krakoff
Yuping Ruan
Binglin Song
Rackham Predoctoral Fellowship
Bradley Dirks
Samal Shivaprasad
Sayantan Khan
Rackham Science Award
Samuel Boardman
Emilee Cardin
Dylan Cordaro
Cyril Cordor
Antonio Castano

Anthony Della Pella
Joanne Dong
Ram Ekstrom
Saida Fatema
Oscar Gonzalez
Gary Hu
Longshyan Lee
Daniel Maes
Juan Morales
Moise Mouyebe
Shivani Prabala
Mia Smith
Ursula Trigos-Raczkowski
Caitlin Waddle
Gabriele & Sophie Rainich Fellowship
Anna Browosky
Joel Smoller Graduate Fellowship
Moise Mouyebe
Usha Sharma Bhalla Fellowship
Makavika Mukundan
Sumner B. Myers Memorial Prize
Xin Zhang
Mathematics Outstanding Teaching Award
Jonathan Guzman
The Karen Rhea Excellence in Teaching Award
Jason Liang
The Mort Brown Excellence in Teaching Award
Emilee Cardin
The Pat Shure Excellence in Teaching Award
Anna Browosky
Golden Stabler Award
Emilee Cardin
Recent Doctorate Degrees

Christina Athanassouli completed her dissertation “Analyzing perturbations of sleep-wake dynamics using bifurcation theory and circle maps” under the direction of Victoria Booth and Danny Forger. She has a position at Georgia Tech.

Jack Carlisle completed his dissertation “Equivariant complex cobordism and geometric orientations” under the direction of Igor Kriz. He has a position at Notre Dame.

Yiwen Chen completed his dissertation “Some results on homogeneity results for GLn” under the direction of Igor Kriz. He has a position at the University of California, San Diego.

Christian Mavrovikoumou completed her dissertation “Membrane flutter in inviscid fluid flow” under the direction of Silas Alben and Karthik Duraisamy. She has a position at New York University.

Andrew McMillan completed his dissertation “A note on dynamic processes” under the direction of Silas Alben and Shaweili Ke. He has a position at Citi.

Shubhodip Mondal completed his dissertation “G_2-perf-modules and de Rham cohomology” under the direction of Bhargav Bhatt. He has a position at the Max Planck Institute.

Khoa Nguyen completed his dissertation “M-theory on G2 manifold mod to phenomenology” under the direction of Lizhun Ju. Khoa has a position at Amazon.

Jenia Rousseva completed her dissertation “Reduction and propagation of coherent states in Bargmann spaces” under the direction of Alejandro Uribe. She has a position at McGill University.

Karen Smith. He has a position at Arrive Logistics, LLC.

Chase.

DeBacker. He has a position at YouTube.

Derksen and Mel Hochster. She has a position at JP Morgan Jump Trading, LLC.

the direction of Andrew Snowden. Hyung has a position at the University of Maryland.

Aleksey Horawa completed his dissertation “Motivic action on coherent cohomology of Hilbert modular varieties” under the direction of Karl Prassana. He has a position at Oxford University.

Yifeng Huang completed his dissertation “Topics on equations on manifolds, positive mass and rigidity results for moduli spaces” under the direction of Michael Zieve. He has a position at the University of British Columbia.

Alana Hunzar completed her dissertation “Non-commutative rank, quivers, and tensors” under the direction of Harm Derksen and Mel Hochster. She has a position at JP Morgan Chase.

Zhi Jiang completed his dissertation “Tensors, cop set and invariant theory” under the direction of Harm Derksen and Karen Smith. He has a position at Arvite Logitals, LLC.

Hyung Kyun Jun completed his dissertation “Curved algebras and the representation theory of inverse monoids” under the direction of Andrew Snowden. Hyung has a position at Jump Trading, LLC.

Benjamin Kralik completed his dissertation “Duality and Hardy spaces on Levi-flat domains with corners” under the direction of David Barrett. He has a position at SIG, LLC.

Jason Liang completed his dissertation “Vinberg representations and 2-descent on Jacobians of curves” under the direction of Victoria Booth and Weizhe. He has a position at the University of California, San Diego.

Yunze Lu completed the dissertation “On the coefficients of some nonabelian equivariant cohomology theories” under the direction of Igor Kriz. Yunze has a position at the University of California, San Diego.

The department continues to thrive at the undergraduate level. Mathematics is mentoring over 1,000 major and minor students each year. In fact, for the last decade mathematics has been one of the ten largest majors (by department) in LSA and one of the three largest minors (by department). Mathematics is currently the largest minor, with 462 declared math minors. Roughly 60 percent of math majors have at least one additional bachelor’s degree major.

In May 2022, the department graduated about 215 majors and 192 minors. The commencement ceremony was held in person once again, where graduates were recognized individually and received a special gift from the department (baseball caps or winter beanies, both with the math logo!). The graduates and their families enjoyed a reception after the ceremony. A ‘Comeback’ ceremony was also held in May 2022 that honored those students who graduated in 2020, when no commencement activities occurred (see photos on page 9).

The awards ceremony was also held in person this year for the first time since 2019. The recipients are detailed on these pages. Nearly $96,000 of award and prize money was distributed to our outstanding students. Besides the department awards, our students have received national recognition. Faye Jackson was the runner up for the 2022 Alice T. Schafer award, and received a 2022 Astronaut Scholarship. Jonah Nan also received the Astronaut Scholarship. Sophie Kriz received an honorable mention for the 2022 Frank and Bennie Morgan Prize (and just received the same recognition for the 2023 prize). Several of our graduating seniors received NSF Graduate Research Fellowships for use to continue their education.

The department also administers some direct scholarships to students of mathematics. Currently, there are 105 students receiving scholarship funds from the department, and the total amount disbursed to them is $503,250. Most awards range from $4,000 to $10,000, are used for tuition support, and are based both on need and merit.

Having students attending the UM in person for the past year has reconnected the many social opportunities in mathematics. The Math Club weekly meetings are again in person, and both speakers and participants enjoy pizza after the talks. The Walking Club, open to anyone in the department who enjoys early morning treks around town, continues to meet daily, and recently incorporated academic advising opportunities during their travels. Friday kayaking is an option, weather permitting. Students are also active in academic pursuits, including the Laboratory of Geometry at Michigan (LGM). Overview of the 2020-2021 academic year at UM is shown in the Gallery on this page.
2022 Undergraduate Awards and Scholarships

**UM Undergraduate Mathematics Competition**
- Young Le - First Place
- Alex Xu - Second Place
- Ramchandra Apte - Third Place

**25th Annual Putnam Mathematics Competition**
- Alex Xu - First Place
- Adam Earnst - Second Place
- Ramchandra Apte - Third Place

**Evelyn O. Bychinsky Award**
- Houming Chen
- Sun Youp Lee

**Marylin and Stewart Gloyer Award**
- Andrew Keisling
- Sophie Kriz
- Xun Wang
- Adam Earnst
- Teo Miklethun
- Adam Earnst
- Jiehan Wu
- Kate Willemin
- Jamie Debrincat
- Jaime Annear
- Sun Youp Lee
- Zhe Zhang
- Jishi Sun
- Nianchen Liu
- Christopher Jiang
- Boyang Huang
- Nameer Hirshkind
- Aayush Dutta
- David Donze
- Houming Chen
- Ramchandra Apte - Third Place
- Alex Xu - Second Place
- Tuong Le - First Place

**Stephen Delbacker presents the Gloyer Award to Kate Willemin.**

**Leon P. Zukowski Prize for Math Lab Mentoring**
- Andrew Keisling
- Sophie Kriz
- Xun Wang
- Adam Earnst
- Teo Miklethun
- Adam Earnst
- Jiehan Wu
- Kate Willemin
- Jamie Debrincat
- Jaime Annear
- Sun Youp Lee
- Zhe Zhang
- Jishi Sun
- Nianchen Liu
- Christopher Jiang
- Boyang Huang
- Nameer Hirshkind
- Aayush Dutta
- David Donze
- Houming Chen
- Ramchandra Apte - Third Place
- Alex Xu - Second Place
- Tuong Le - First Place

**Want Your Own Math T-Shirt?**

Here is your chance to represent the UM Math Department in the stylish shirts highlighted on the next page. Complete the order form below by placing a number (signifying the quantity desired) in the appropriate boxes (sizes are standard adult), complete your address information, and return to the address desired) in the appropriate boxes (sizes are standard adult), complete your address information, and return to the address desired (sizes are standard adult). Complete your address information, and return to the address desired (sizes are standard adult). Complete your address information, and return to the address desired (sizes are standard adult).

**Where should we mail your t-shirt?**

**Name:**

**Address 1:**

**Address 2:**

**City:**

**State:**

**Zip:**

**Amount Enclosed:**

**Total T-shirts Ordered:**

**E-mail Address:**

Send this form with payment to:

The University of Michigan Department of Mathematics
T-shirt Orders
530 Church Street, 2074 East Hall
Ann Arbor, MI 48109-1043

Online ordering and payment available at lsa.umich.edu/math/about-us/math-t-shirts.html
June Huh Received Fields Medal

In the summer of 2022, the department was excited to learn that June Huh, a 2014 PhD graduate under the direction of Mircea Mustață, was named a 2022 Fields Medalist. One of the highest honors in mathematics, the Fields Medal is presented by the International Mathematical Union. Currently a professor at Princeton University, Huh is cited “For bringing the ideas of Hodge theory to combinatorics, the proof of the Dowling-Wilson conjecture for geometric lattices, the proof of the Heron-Rota-Welsh conjecture for matroids, the development of the theory of Lorentzian polynomials, and the proof of the strong Mason conjecture.”

After receiving his PhD, Huh was a Fellow at the Clay Mathematics Institute from 2014-2019. He joined the Institute for Advanced Study at Princeton as a Veblen Fellow (2014-2017), Visiting Professor (2017-2019) and Fernholz Visiting Professor (2019-2020). He was a Professor at Stanford University before joining the faculty at Princeton.

Huh received early recognition for his mathematical work. From UM he received the Summer Myers Thesis Prize and the Wirt and Mary Cornwall Prize in mathematics. He was an invited speaker at the International Congress of Mathematicians in 2018 and received the New Horizons Mathematics Prize in 2019. He was recently named a MacArthur Fellow.

Further information about these awards, Huh’s career, and interesting videos about his work, can be found on the following web pages:

mathunion.org/imu-awards/fields-medal/fields-medals-2022
macfound.org/fellows/class-of-2022/june-huh

Alums Achieve FSA Status

Nabil Ahmed and Kah Jun Lim, both of whom graduated in 2019 with BS degrees in mathematics concentrating in actuarial science, became Fellows of the Society of Actuaries in December 2021. Earning an FSA just two and a half years after graduating is rare. Nabil joined AETNA as an Actuarial Analyst, and in fall 2021 enrolled at Stanford University to pursue a Master’s degree in data science. Kah, who quadruple-majored in actuarial math, computer science, data science, and statistics, with a minor in complex systems, joined Central Bank of Malaysia as an insurance regulator.

Where’s Your Math T-shirt Been?

When you got your math T-shirt, find a fun spot to take a picture and upload it to our website lsamich.umd/undergraduates/extracurricular-activities.html. The button “Where in the World is Your Math T-shirt?” has links to a Google drive to add your photo, as well as a map where you can indicate where in the world you displayed your mathematics pride: padlet.com/mathundergradoffice/worldtshirts. You can also send them by email to um.math.tshirts@gmail.com.

Alumni Highlights

Emily Witt Receives Michler Prize

Emily Witt, a 2011 PhD graduate under the direction of Mel Hochster, received the 2022 Ruth I. Michler Prize from the Association for Women in Mathematics and Corenll University. Witt is cited for “her research accomplishments in commutative algebra. Her results on local cohomology modules based on applications of invariant theory have been groundbreaking, striking, and unexpected. Her techniques are innovative and broadly applicable. Witt will use the award to pursue a research project at the intersection of commutative algebra, algebraic geometry, and singularity theory. The project’s title, Invariants of Singular Plane Curves, is a tribute to the paper with the same title published by Ruth I. Michler posthumously.”

After receiving her PhD, Witt was a Dunham Jackson Assistant Professor at the University of Minnesota, a Postdoctoral Fellow at the Mathematical Sciences Research Institute, and a Research Assistant Professor at the University of Utah. Since 2015, she has been a faculty member at the University of Kansas, where she was promoted to Associate Professor in 2020. She currently holds the institution’s Keeler Intra-University Professorship, under which she is collaborating with computer science faculty on the use of proof assistant software to develop formal proofs.

Witt is involved in a number of initiatives promoting diversity in the mathematical community. She co-organized the first Women in Commutative Algebra research collaboration workshop, and co-directed, with UM Alum Daniel Hernández, an REU program in algebra and cryptography serving students from underrepresented groups.

Emily Witt Receives Michler Prize

Emily Witt, a 2011 PhD graduate under the direction of Mel Hochster, received the 2022 Ruth I. Michler Prize from the Association for Women in Mathematics and Corenll Uni-
ContinuUM Editorial Board
Anthony Bloch (Chair), Suzanne Rogers (Editor), Stephen DeBacker, Doreen Fussman, Ralf Spatzier.

Photos by Michigan Photography, the Department of Mathematics, or submitted by the individuals.

Regents of the University of Michigan: Jordan B. Acker, Michael J. Behm, Mark J. Bernstein, Paul W. Brown, Sarah Hubbard, Denise Ilitch, Ron Weiser, Katherine E. White, Santa J. Ono, ex officio

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Watch for our email on March 15, 2023!