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Fall 2023 Volume 20 K. Johnson-McWilliams, Editor

# math@andrews

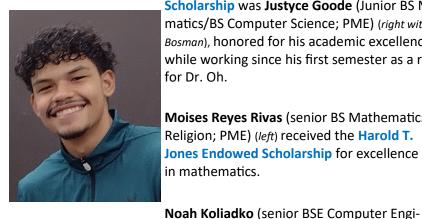
# **Mathematics Awards Ceremony 2023**

The 2023 Mathematics Awards Ceremony took place in the Thompson Amphitheater on April 28. The professors presented 49 class awards to 38 individuals. Students receiving more than one award include Zachary Duah (3), a Berrien Springs High School senior who took multiple upper-division mathematics classes; Alan Grimm (2), junior BS Math/BS Computer Science/Mathematical Studies major; Joshua Harrington (2) senior BSE Mechanical Engineering/Mathematical

Studies; Rekha Isaac (2), senior BS Biochemistry/BS Mathematics; Olivia Jordan (2), sophomore BS Mathematics Education/Secondary Education/ BA Religion; Noelle Koliadko (2), senior BS Mathematics/BS Computer Science; and Alexander Navarro (4), senior BS Mathematics/BS Physics.

#### The recipient of Harold Buhalts Boyd and Jean Stewart Boyd Endowed

neering/BS Physics/Mathematical Studies; PME; Sigma Pi Sigma) (right with Dr. Oh) received the Edward J. Specht Endowed Scholarship for

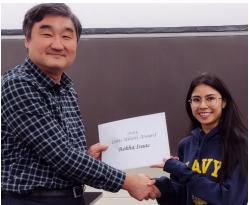


Scholarship was Justyce Goode (Junior BS Mathematics/BS Computer Science; PME) (right with Dr. Bosman), honored for his academic excellence while working since his first semester as a reader for Dr. Oh.

Moises Reyes Rivas (senior BS Mathematics; BA Religion; PME) (left) received the Harold T. Jones Endowed Scholarship for excellence in mathematics.







excellence in mathematics and physics.

The Louis Ulloth Endowed Scholarship went to Rekha Isaac (senior BS Biochemistry/BS Mathematics; PME)

(left with Dr. Kang) for excellence in mathematics and the sciences and positive contribution to the department.

The final scholarship winner was Alexander Navarro (senior BS Mathe-

matics/BS Physics; J. N. Andrews Honors Scholar, PME; Sigma Pi Sigma), (right with Dr. Bosman) who received the Whitney Wang Watson Endowed Scholarship for excellence in mathematics and commitment to serving God by helping others, easing suffering, and improving lives.



Facts Cor	ncerr	nin	g t	he	Fal	2	023	B Dep	bartn	nent	of Mathematics Student Body
Major	Total	F	м	FR	so	JR	SR	Dual Majors	Three Majors	Four Majors	Other Majors
BS Data Science	6	3	3	1	1	1	3	0	0	0	
BS Mathematics	22	6	16	5	3	5	9	15	1	0	1 Biochemistry, 1 Chemistry, 7 Computer Science, 1 Engi- neering, 2 Music, 3 Physics, 1 Religion,
BS Mathematics Education	2	2	0	0	1	1	0	1	1	0	1 Religion, 2 Secondary Certification
Mathematical Studies	13	2	11	1	0	4	9	10	2	1	1 Chemistry [ACS], 4Computer Science, 7 Engineering, 4 Physics
Mathematics Minor	15	5	10	1	0	2	12	1	0	0	3 Computer Science, 1 Elementary Ed, 7 Engineering, 1 General Studies, 1 PR, 2 Religion, 1 Secondary Ed Cert,

## Research

#### Books

Henson, S. M., & Hayward, J. L. 2023. Mathematical Modeling in Biology: A Research Methods Approach. CRC Press.

#### **Publications**

Polski, A. A., Osborn, K. J., Hayward, J. L., Joo, E., Mitchell, A. T., *Sandler, A. G.*, & Henson, S.M. 2021. Egg cannibalism as a foraging tactic by less fit Glaucous-winged Gulls (*Larus glaucescens*). *Wilson Journal of Ornithology*, 133:552-567. doi.org/10.1676/20-00072

Nurhan, Y. I., & Henson, S. M. 2021. Cannibalism and synchrony in seabird egg-laying behavior. *Natural Resource Modeling* 34: e12325. doi.org/10.1111/nrm.12325

Atkins, G. J., Hayward, J. L., & **Henson, S. M.** 2021. How do gulls synchronize every-other-day egg laying? *Wilson Journal of Ornithology* 133:226-235. doi.org/10.1676/20-00019

Weir, S. K., Henson, S. M., Hayward, J. L., Atkins, G. J., Polski, A. A., Watson, W. W., & *Sandler, A. G.* 2020. Every-otherday clutch-initiation synchrony as an adaptive response to egg cannibalism in Glaucous-winged Gulls (*Larus glaucescens*). Wilson Journal of Ornithology 132:575–586. doi.org/10.1676/19-82

#### Presentations

Bihler, M., Nelson, H., Okey, E., Reyes Rivas, N., Webb, J., & White. A. Presentation. "Modeling supply and demand in public transportation systems." Joint Mathematics Meetings. Boston, MA, January 4-7, 2023.

**Bosman, A. M., Green, J. M., Reyes Rivas, M., Reyes, N., & Palacios, G. E**. Presentation. "The impact of the delta-move on the 4-genus of links." Michigan Academy of Science, Arts, and Letters Conference, Andrews University, Berrien Springs, MI, March 17, 2023.

Bosman, A. M, Kas-Danouche, Y. A., Garcia, D. G., Smith, D., & Goode, J. J. R. Poster. "Self and mixed delta-moves on algebraically split links." Michigan Academy of Science, Arts, and Letters Conference, Andrews University, Berrien Springs, MI, March 17, 2023.

**Bosman, A. M.** Presentation [virtual]. "Teaching a 1-credit topology course." Nearly Carbon Neutral Geometric Topology Conference, September 18-25, 2022.

**Bosman, A. M.** Presentation [virtual]. "Teaching topology without a topology course." Nearly Carbon Neutral Geometric Topology Conference, September 18-25, 2022.

Clough, S. R., & Cross, G. B. Presentation. "Conductivity of MEPA-MOCVD grown InN and other group-III nitrides."
 Michigan Academy of Science, Arts, and Letters Conference, Andrews University, Berrien Springs, MI, March 17, 2023.
 Duah, Z. Presentation. "The delta crossing number for links." Michigan Academy of Science, Arts, and Letters Conference, Andrews University, Berrien Springs, MI, March 17, 2023.

Duah, Z. Presentation. "The delta crossing number for links." Pi Mu Epsilon, Joint Mathematics Meetings, Boston, MA, January 4-7, 2023.

Garcia, D. G., & Oh, Y. M. Presentation. "On the development of sequential involutes in Euclidean and Minkowski spaces." Joint Mathematics Meetings, Boston, MA, January 4-7, 2023.

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## **Research (continued)**

Garcia, D. G., & Oh, Y. M. Presentation. "A curve satisfying tau/kappa=1/s with constant curvature kappa with additional numerical analyses." Pi Mu Epsilon, Joint Mathematics Meetings, Boston, MA, January 4-7, 2023.

Goode, J. J. R., Smith, D., Garcia, D. G., Kas-Danouche, Y. A., & Bosman, A. M. Presentation. "Delta-splitting number of algebraically split links." Pi Mu Epsilon, Joint Mathematics Meetings, Boston, MA, January 4-7, 2023.

Goode, J. J. R., Reyes Rivas, M., & Smith, D. (with Bosman, A. M.). Presentation. "Cutting the knot: Delta-move on links." Colloquium, Department of Mathematics, Grand Valley State University, Allendale, MI, November 4, 2022.

**Henson, S. M.** Presentation. "Climate change and tipping points for seabird colonies in the Pacific Northwest." Colloquium, Department of Mathematics, Grand Valley State University, Allendale, MI, March 17, 2023.

**Henson, S. M.** Presentation [virtual]. "Periodic matrix models for seasonal dynamics of seabirds." Theoretical and Statistical Seminar, Maynooth University, May 11, 2022.

**Isaac, R. L., Wolf S., Kang, M. S., Cha, J., Choi, C., Choi, E., Yi, J., Benjamin, A., &** Wong, B. Y. Y. Presentation. "Aqueous extract of *Bryophyllum pinnatum* induces and modulates apoptosis in MDA-MB-157, 93A, and 93B breast cancer cells." Michigan Academy of Science, Arts, and Letters Conference, Andrews University, Berrien Springs, MI, March 17, 2023. **Kang, J. H.** Presentation. "Existence, estimate of positive solutions with uniqueness for a general elliptic system with application." Kangyuan Kuunggi Mathematics Conference, Cangnoung Wonin University, Cangnoung South Karea, June 16.

cation." Kangwon-Kyunggi Mathematics Conference, Gangneung-Wonju University, Gangneung, South Korea, June 16, 2023.

**Kang, J. H.** Presentation. "Existence, estimate of positive solutions with uniqueness for a general elliptic system with application." Michigan Academy of Science, Arts, and Letters Conference, Andrews University, Berrien Springs, MI, March 17, 2023.

Kas-Danouche, Y. A., Smith, D., Garcia, D. G., & Bosman, A. M. Presentation. "Self and mixed delta-moves on algebraic split links." Pi Mu Epsilon, Joint Mathematics Meetings, Boston, MA, January 4-7, 2023.

Koliadko, N. D., Inae, C. K., Johnson, J. R., Wing, S., Nishimura, T., & Mrak, S. Presentation. "Analyzing the ionospheric drivers of scintillations." Michigan Academy of Science, Arts, and Letters Conference, Andrews University, Berrien Springs, MI, March 17, 2023.

Koliadko, N. L. & Kang, J. H. Presentation. "Existence and nonexistence for a general elliptic system with application." Michigan Academy of Science, Arts and Letters, Andrews University, Berrien Springs, MI, March 17, 2023.

Martin, W. J., Johnson, J., Wing, S. Ma, X., & Delamere, P. Presentation. "Identifying Kelvin-Helmholtz turbulence structures and cross-scale coupling in MHD and hybrid simulations with transfer entropy." Michigan Academy of Science, Arts, and Letters Conference, Andrews University, Berrien Springs, MI, March 17, 2023.

**Oh, Y. M.** Presentation. "Recent development of Ricci solutions with torqued vector fields." Kangwon-Kyunggi Mathematics Conference, Gangneung-Wonju University, Gangneung, South Korea, June 16, 2023.

**Oh, Y. M.** Presentation. "Some notes on Ricci solutions with torqued vector fields." Michigan Academy of Science, Arts, and Letters Conference, Andrews University, Berrien Springs, MI, March 17, 2023.

**Reyes Rivas, M., Reyes Rivas, N., Green, J. M., Palacios, G. E., & Bosman, A. M.** Presentation. "Delta-unlinking number for algebraically split links." Pi Mu Epsilon, Joint Mathematics Meetings, Boston, MA, January 4-7, 2023.

**Reyes Rivas, M.,** & Block, D. Presentation. "The existence and uniqueness of a Nash equilibrium in mean field game theory." Michigan Academy of Science, Arts, and Letters Conference, Andrews University, Berrien Springs, MI, March 17, 2023. **Reyes Rivas, M.** Presentation. "The existence and uniqueness of a Nash equilibrium in mean field game theory." Rose-Hulman Institute of Technology Undergraduate Mathematics Conference, Rose-Hulman Institute of Technology, Terre Haute, IN, April 21, 2023.

Shepard, K. G. Thesis defense. "Determining the origins of helix glitches in LIGO's H1 and L1 detectors." J. N. Andrews Honors Thesis Symposium, Andrews University, Berrien Springs, MI, April 14, 2023.

Smith, D., Garcia, D. G., Goode, J. J. R., Kas-Danouche, Y. A., & Bosman, A. M. Presentation. "Self and mixed deltamoves on algebraically split links." Michigan Academy of Science, Arts, and Letters Conference, Andrews University, Berrien Springs, MI, March 17, 2023.

Toc Casia, B. N. Thesis defense. "Building and evaluating AI models for cello fingerings." J. N. Andrews Honors Thesis Symposium, Andrews University, Berrien Springs, MI, April 14, 2023.

Wolf, S., Choi, C., Choi, E., Cha, J., Kang, M. S., Yi, J., Benjamin, A., Isaac, R. L., Hayes, R., Uppala, P. T., & Wong, B. Y. Y. Presentation. "Induction and modulation of apoptosis in pancreatic adenocarcinoma BxPC-3 cells by Chinese medicinal herb *Scutellaria barbata* and *Oldenlandia diffusa*." Michigan Academy of Science, Arts, and Letters Conference, Andrews University, Berrien Springs, MI, March 17, 2023.



# 2022-2023 Graduates

Devin Garcia (BS Physics/Mathematical Studies; PME; Sigma Pi Sigma) (*left*) has moved back to Virginia and is looking for jobs in industry while applying to graduate schools. He has found a new passion in playing pickle ball and competing in tournaments.



Jeannelle Green (BS Mathematics/Premedical; PME) (*right*) spent the summer taking part in the Big Data Summer Institute held at the University of Michigan and sponsored by the National Heart, Lung, and Blood Institute. An introduction to biostatistics, the program includes lectures, mentoring for careers and grad school, and a research project. Amazingly Jeannelle managed to take the MCAT and apply to medical school this summer while working in the Institute. She is taking the fall off and then will go to France to study through ACA. The length of her stay there depends on whether she will need to be in the States for in-person med school interviews or visits.

Caleb Jacobs (BSE Chemical Engineering/Mathematical Studies; Gamma Sigma Epsilon; PME) (*left*) is pursuing his PhD in Chemical Engineering at Purdue University.

MinSeo Kang (BS Mathematics; PME) (right) is attending the MD program at Loma Linda University Medical School.

Kira Marsh (BS Data Science; PME, Sigma Pi Sigma) (*left*) finished her Data Science degree in December and has been working for Andrews in Marketing and Enrollment Management.



Wesley Martin (BS Physics/Mathematical Studies/BS Computer Science; PME; Sigma Pi Sigma) (right) is taking a gap year to do research with Dr. Johnson. Wesley has been living with his family in Knoxville while doing research and hopes to have a paper published soon. He presented his research at a conference in Germany this summer and went with his family to China for a month to visit his mom's relatives. He is also preparing applications to graduate schools and to a few jobs as well.

Jongwan Park (BS Biochemistry [ACS]/Math Studies; Gamma Sigma Epsilon; PME) (*left*) is attending the dentistry program at Loma Linda Medical School.







Noe Reyes (BS Mathematics; PME) (right) is studying at Brown University, pursuing a PhD in applied mathematics.

Kara Shepard (BS Physics/Mathematical Studies; PME; Sigma Pi Sigma) (*left*) travelled around Europe with her family this summer and is completing physics graduate school applications this fall.

Bryan Toc Casia (BS Computer Science/Mathematical Studies) (right) is hoping eventually to pursue an MA in Music. Currently he is working as the audio visual production supervisor at Andrews ITS.

Dillon Walter (BS Mathematics; PME) (left) finished in December and worked as a short-term missionary in Kendu Adventist Hospital in Kenya, working in IT at a church school there before coming back in May to march at graduation. He passed his first actuarial exam last fall and is pursuing a career as an actuary, working with Arch Mortgage Insurance Company.

Chun Lok Wong (BSE Mechanical Engineering/Mathematical Studies) (right) returned to Hong Kong to look for an engineering job.













### **Updates**

#### **Changes at RESA:**

The RESA Math and Science Center has experienced some personnel changes this year. **Abdias Vence** (*right*) has been working full-time as an instructor at the Center since Fall 2011, teaching Geometry, Algebra II, and Precalculus. This past spring he decided to retire to spend more time with his garden, which includes scads of produce, including lettuce, beets, potatoes, corn, broccoli, kale, peas, green beans, and beans that he dries. He also makes his own bread with his homegrown wheat that he has made into flour.



Replacing him as the full-time instructor is **Amanda Umlauf**, who has worked at the Center half-time since Fall 2011. Mandy has taught Algebra II and the AP Calculus class for RESA but has now transitioned to teaching both Algebra II classes and the Geometry class.

Our new half-time RESA instructor is **Chantel Blackburn**, who teaches Precalculus and AP Calculus. Chantel and her cats moved from California this August and is a great match for the job since she specializes in teaching mathematical knowledge at the lower levels. She graduated from Andrews in 2006 with a BS in Mathematics and then completed her

MS and PhD in Mathematics at the University of Arizona. Before coming back to Andrews this time, she taught at Pacific Union College (PUC) for ten years.

#### **Retirement Activities:**

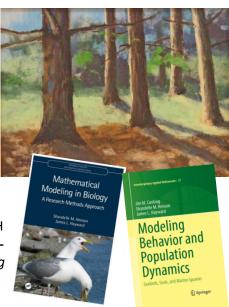


Since retiring from teaching, Prof. Shandelle Henson has been busy writing research books and painting *en plein air* and in her home studio. She belongs to several painting groups

and shows her work in juried exhibits in the area. Her paintings *River Birches on Juday Creek (left)* and *White Pine Grove (right)* recently won awards in shows held at Fernwood Botanical Gardens in Niles, Michigan, and Colfax Cultural Center in South Bend, Indiana, respectively. You can check out her artist Web site, Plein Air Landscapes, at <u>https://</u> www.shandellehenson.com.

In addition, Dr. Henson has been working on three books. One of those, *Mathematical Modeling in Biology: A Research Methods Approach*, coauthored with her husband, Professor Emeritus of Biology Jim

Hayward, was published by CRC Press this past spring. She is using it in the MATH 426 class that she is teaching for the Department this fall. One of our majors, **Jessica Rim** (*see below*), prepared the figures for the book. A second book, *Modeling Behavior and Population Dynamics*, coauthored with Dr. Hayward and Jim Cushing from University of Arizona, is in galleys. This book pulls together 20 years of research by the Seabird Ecology Team. Currently she and four collaborators are



writing a book that showcases the large body of research conducted by the Beetle Team, the first group to demonstrate chaotic dynamics in a population. Dr. Henson's retirement is busier than many people's work life!

#### Alumni Updates:

Lucinda Ford (2019 BS Mathematics, Phi Kappa Phi; PME) is gathering data for her dissertation as she prepares to complete her PhD at Texas State University. She and her fellow researchers recently published an article in the *Journal of Academic Support Programs*. You can read it online at <u>https://jcasp-ojs-txstate.tdl.org/jcasp/article/view/172</u>

Jessica Rim (2022 BS Psychology/Mathematical Studies; PME) was accepted to master's programs at Boston College, Columbia University, Weill Cornell, and Icahn. Of these, she chose to accept admission into Weill Cornell, where she is studying in the MS Biostatistics and Data Science program.





#### **Remembering John Henson**

John William Henson III (father of Dr. Shandelle Henson of the Department of Mathematics) died on March 13, 2023, at the hospital in St Joseph, Michigan, after a week's

illness. People who knew John Henson say that he was ethical, honest, and compassionate, one who saw all people as his neighbors. Dedicated to his family, he also cared about issues in the wider world, protesting racial segregation in Chattanooga in the '50s and '60s and consistently supporting women's rights.

Born in 1930 near Collegedale, TN, to a farming family, John lost his father when he was six months old, leaving his mother to raise him alone in a small white house near Southern Missionary College. His mom became an Adventist when he was a child, and since Adventists were proponents of getting a good education, John attended Collegedale Academy and then Southern, earning a BS in Chemistry with a minor in German, a language that he spoke fluently.

In 1951 John married Audrey Gackenheimer and remained married for 72 years until his death. He was president of Starkey Printing Company in Chattanooga, Tennessee, until his retirement, although the couple moved to Niles, Michigan, in 2011 to live near Dr. Henson.

Dr. Henson recalls, "My older sister, Brenda; older brother, John; and I were surrounded by intellectual interests at home. We would sit around the family dinner table every night, and Dad would often start an intellectual discussion with us. We were encouraged to make our opinions known and then defend them. Occasionally this led to tears of frustration, but more often it led to, 'That's a pretty good argument.'" All three children went on to further learning in graduate school and research careers in which they utilized the skills that their father instilled in them.

Predeceased by his parents and daughter Brenda, John Henson III is survived by his wife, son (John Henson IV), and daughter (Shandelle Henson).

## **Events**

#### **Memorial Artwork**

The Departments of Mathematics and Biology (for whom Dr. Henson has taught) collaborated in purchasing a piece of artwork to honor Dr. Henson's father. They chose



"Trippy Entanglements," a fractal artwork by Goshen artist Kevin Gross. If you visit the Department, you can see the picture which is hung outside of room 113 for everyone to enjoy.

#### Honoring 25 Years of Service to the AU

Dr. Lynelle Weldon, our current department chair, was hon-



ored this past spring at the Faculty Awards Ceremony for her 25 years of service to Andrews University. Dr. Weldon has been a member of the Department of Mathematics since 1997 and the Chair since 2016, when she also received the Daniel A. Augsburger Excellence in Teaching award.

Her colleagues enjoy working with Dr. Weldon and consider her to be an amazing teacher, one whose office is open to students who need extra

help. She models the growth mindset that she urges her students to develop. As a chair, she makes studied, fair decisions and always strives to help students succeed.

The Department appreciates Dr. Weldon's 25 years of service at Andrews University.

#### Andrews University's ranks in year's national college rankings:

#1 private university in Michigan
#1 for student experience in Michigan
#1 for ethnic diversity in the nation
#14 among best Christian colleges in the nation
A- for campus food

For more information see the Agenda article written by Dr. Bosman and Stephen Payne: https://www.andrews.edu/agenda/64197

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## **Math Center Remodel Project**

In our newsletter last year, we announced that we hoped to update the outdated furniture in the Math Center. We are pleased to announce that this past spring the Department of Mathematics took the first step in its plans to replace the outdated furniture in the Math Center. Many of you will remember the brown plastic chairs that were in the Commons area before we remodeled that about ten years ago. The chairs were even more torn and frayed, and some of them were missing the leveling base on one or more of their legs, making them quite wobbly



(see right). They had served us well, but they went to Custodial (or the dumpster, depending on their condition) when we purchased the new chairs (see left) that match those in the Commons area. They are sturdy and comfortable and roll easily, which will be important when we replace the hodge-podge of tables that we scrounged from Custodial twelve years ago when we changed the layout of the Center.



The next phase of the plan is to purchase easily movable tables that will allow flexibility for different classroom configurations. Any donations that you send for this project will go directly to the cost of purchasing these. We can even add plaques to the tables if you want to buy one as a memorial to someone you love or someone who cares about education. Hopefully next year we will have a picture of the finished update and can show you some of the ways that we can configure the room.

You can give online at <u>www.andrews.edu/go/give</u> and choose **Department of Mathematics 270500** from the drop-down menu. Just put *Math Center remodel* in the instructions. Or you can send a check made out to Andrews University to this address:

> Andrews University Office of Development 8903 US Highway Berrien Spring MI 49104-0660

If any of you are curious about how many hours tutors have worked in the Center since 2010 (when we started compiling the results) or how many students have received tutoring there or what classes they needed help for, we can get that information from our spreadsheet on Math Center usage. For example, last year the Math Center was open from 5:00-7:00 Sunday through Thursday for drop-in tutoring and served 247 students (many are repeat customers), with three tutors in the Fall and six tutors in the spring (including two dedicated STATs tutors) who worked a total of 311.58 hours. The class for which most students came



for tutoring was College Algebra, followed by the developmental math classes, Calculus II, and Calculus I.

With continued tutor training and a remodeled space that offers a clean, comfortable environment for students, we hope to get our tutoring numbers back to the pre-COVID rates. The Math Center is a reliable way for the department to help students to thrive in mathematics.

#### **Andrews University**

#### **Department of Mathematics**

#### Programs

BS in Data Science BS in Mathematics BS in Mathematics Education Mathematical Studies Major Mathematics Minor Mathematics Education Minor Minor in Mathematics of Economics and Finance

#### PME Michigan Gamma Chapter

\*Moises Reyes-Rivas, President \*Joseph Hei-Yin Shiu, Vice President \*Hayden Baldwin, Secretary-Treasurer \*Dr. Joon Hyuk Kang, Advisor

eigen\* Mathematics & Physics Club

\*Davielle Smith, Mathematics President \*Noah Koliadko, Physics President

#### **Mission Statement**

Through teaching, research, and service, the Department of Mathematics seeks to provide leadership by:

\*Preparing a diverse student body with the mathematical understanding, problem-solving skills, and dispositions that enable career excellence;

\*Increasing mathematical and scientific knowledge through publication and presentation and engaging undergraduates in research;

\*Supporting the broader mathematics education community and mentoring others for generous service through a committed Christian life.

> WWW.math.andrews.edu Department of Mathematics Andrews University Berrien Springs, MI 49104-0350 math@andrews.edu



Front row (left to right): Justyce Goode (sophomore BS Mathematics/BS Computer Science), Noe Reyes Rivas (senior BS Mathematics), Rekha Isaac (senior BS Biochemistry/BS Mathematics), Joseph Shiu (senior Data Science). Back row (left to right): Moises Reyes Rivas (senior BS Mathematics/BA Religion), Zachary Duah (college sophomore by credits, Berrien Springs High senior), Julia Randall (senior BS Chemistry/BA Spanish/Language, Literature & Culture), Obed "Trey" Matus (junior BS Computer Science/BS Mathematics), Joshua Harrington (senior BSE Mechanical Engineering/Mathematical Studies). Not pictured: Elmus Khye Herng Lim (junior BSE Electrical Engineering).

#### **Pi Mu Epsilon Induction**

The Michigan Gamma Chapter of Pi Mu Epsilon inducted 10 new members on Friday, March 31st. **Moises Reyes Rivas** (senior BS Mathematics/BA Religion) is the 2023-24 PME president with **Joey Shiu** (senior BS Data Science) as his vicepresident. The two chose **Hayden Baldwin** (BS Computer Science) as their secretary-treasurer.



Some of our 2023 graduates and the Department of Mathematics professors: (*Left to right*) Shandelle Henson, Joon Kang, Yun Oh, Lynelle Weldon, Kara Shepard, MinSeo Kang, Gabriel Palacios, Jeannelle Green, Caleb Jacobs, Dillon Walter, Devin Garcia, Noe Reyes, Anthony Bosman.

For more pictures, go to our AU Mathematics page on *Facebook*. And while you are online, check out our Math at Andrews *YouTube* channel. We have over 11,300 subscribers and 185 videos, one of which has over 51,000 views!

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