

THE SUM TIMES

IN THIS ISSUE

SUMMER ADVENTURES

SUNSETS OVER IOWA CITY

RECIPES

MGB FALL PICNIC

ANNOUNCEMENTS

MEET THE FIRST YEARS!

MATH MEMES

CALCUDOKU



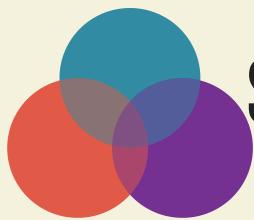
© Casey Anna Photography 2019



Margarita, Fatou, and Casey put on a fabulous math department girl's night earlier this month full of fun games, great food, and lots of laughter.

On behalf of everyone who attended, thank you all so much for organizing this wonderful evening.

-Jessa



SUMMER ADVENTURES

We asked our readers what they were up to this summer, and here is some of the excitement that they wanted to share with the department!



I finished mixing all my old music from undergrad! There are over 20 collaborators on it (most from my college), so

I'm very excited to get in touch with everyone again once I have release dates to announce (next year!). Very excited to move on to the next chapter of music-making now that all this old music is pretty much completed.

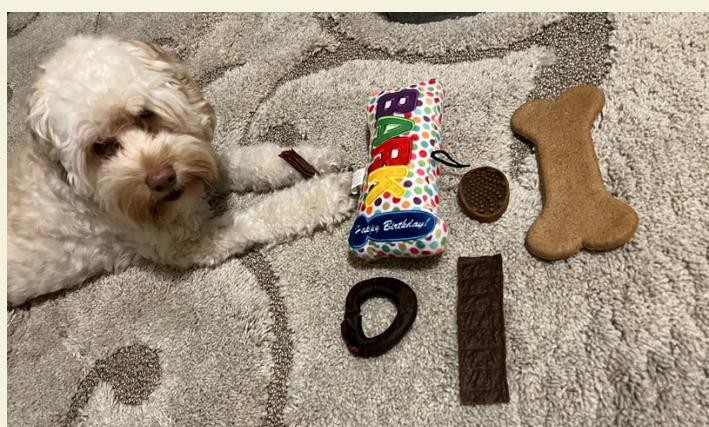
-Joey Small



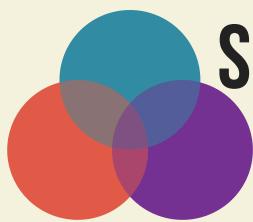
Liz Brass was caught studying hard in the library this summer for her qualifying exams! (left)



Congratulations to Claire on her marriage this summer! We wish her and her spouse, Trent, the best in this new chapter of life. Some people that helped celebrate their marriage were Matthew, Adriana, Anna, Eddie, and Garrett.



Jessa and Devon celebrated Reese's 2nd birthday with complimentary goodies from Muddy Paws. (above)



SUMMER ADVENTURES

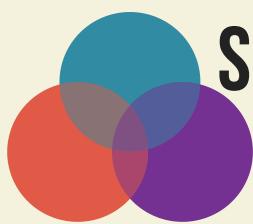
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This summer, Schuyler and I went on a trip to Italy! It was technically our honeymoon, though we got married in December. We visited Rome, Venice, and Florence. It was fantastic to see so many sights that you normally only get to look at on Wikipedia. The whole country is full of amazing food, culture, and people. Highlights include Vatican City, the Colosseum, and the statue of David. We also took a wine tour through Tuscany and tried some amazing red wine. 10/10.

-Kitrick Fynaardt





SUMMER ADVENTURES

(CONT.)

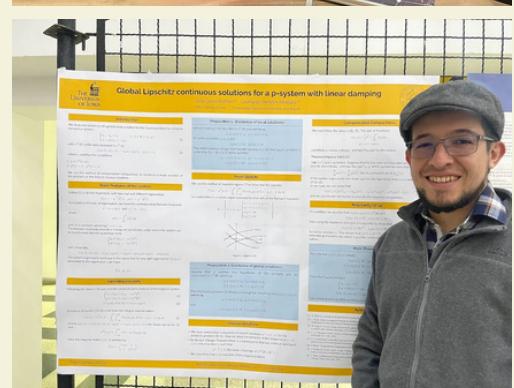
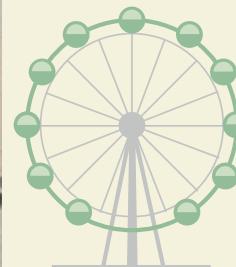


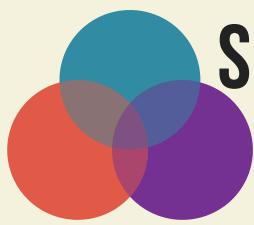
I presented a poster at the "XXIII Colombian Congress of Mathematics" at the Universidad Pedagógica y Tecnológica de Colombia, Tunja-Colombia. I had the chance to reunite with some of my friends and my undergrad advisor, Prof. Arturo Sanjuán (in the pictures). I also gave a talk at the "Encuentro Latinoamericano de Estudiantes de Doctorado en Modelamiento, Ingeniería y Ciencias" at the Universidad de Chile, Santiago - Chile.

-Jose David Beltran



A few math department friends took a day trip to Des Moines to visit the Iowa State Fair!



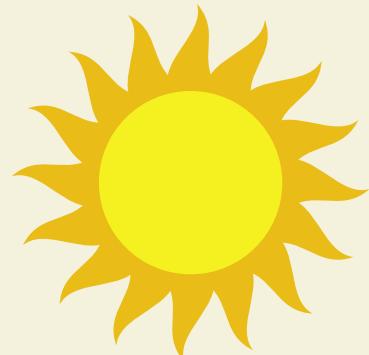


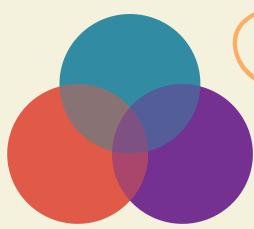
SUMMER ADVENTURES (CONT.)



In August, I attended a Roots of Unity Reunion at California Institute of Technology in Pasadena, California. Here are some beautiful pictures that I hope you enjoy!

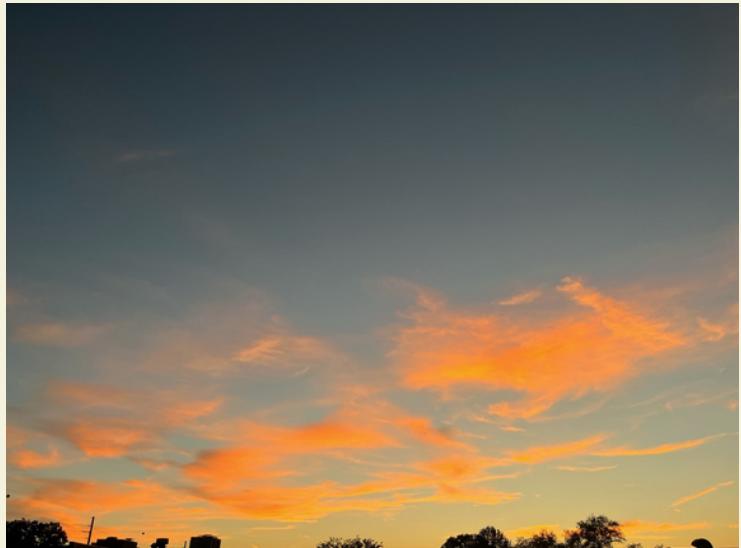
-Margarita
Bustos Gonzalez





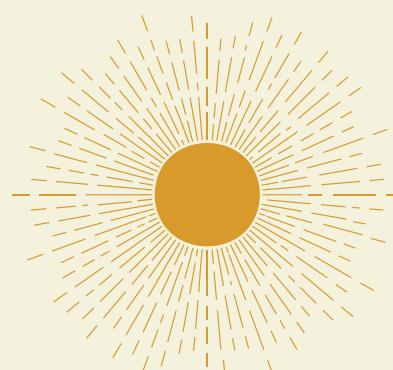
Wow!

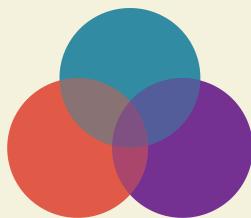
SUNSETS OVER IOWA CITY



These beautiful sunsets are courtesy of Nikita Kapur.

Thank you, Nikita, for your gorgeous submissions!





RECIPES



We also asked our readers for some of thier favorite recipes. Here is a recipe to make theibb/jolof rice (vegan style) contributed by Fatou Kineh Ndow. Thanks, Fatou!

Ingredients:

2 cups of broken jasmine rice or regular jasmine rice
1 bag of broccoli (steamed)
1 can of mixed veggies (carrots, peas, corn etc.)
2 bell peppers
2 habanero peppers

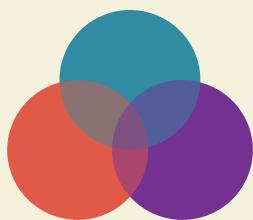
For the sauce:

1 cup vegetable oil
1 cup tomato paste
1 large onion (sliced)
3 cloves of garlic
1 tsp black pepper
Salt to taste
Italian seasoning



Instructions:

1. In a mortar and with a pestle or in a food processor grind the garlic, habanero and peppers and into a rough paste.
2. Sauté the sliced onions in the oil over medium heat until translucent.
3. Add in the tomato paste and stir fry for 5 minutes. The tomato paste may start to brown a little.
4. Add in the ground garlic and scotch bonnet and stir fry for another 2 minutes.
5. Add in salt, black pepper, Italian seasoning and 8 cups of water. At this stage, taste the sauce for salt, and adjust to your preference.
6. Wash, drain rice and pour into the boiling sauce. Adjust the amount of water to how well you want the rice to be cooked.
7. Cover the pot and simmer on low-medium heat for 20-25 minutes.
8. At the 20-minute mark, check that the rice has absorbed the moisture and is soft. If the water has dried up and the rice is still not soft, add in 5-6 tbsp of water, cover and allow to cook.
9. When the rice has softened, add in the mixed vegetables and broccoli (make sure the water in the can is drained). Mix the rice and veggies.
10. Cover and cook for another 5 minutes if it needs more time.
11. Serve hot with more vegetables, fish, chicken or your protein of choice.



RECIPES

(CONT.)

Feast your eyes on these wonderful recipes recommended by Elise Askelsen. Elise is the math department's resident chef extraordinaire, so you know these have to be good!

Sweet Potato Thai Curry

Ingredients:

- 1 ½ Tbsp coconut oil
- 1 yellow onion, diced
- 2 cloves, minced
- 3-4 Tbsp Thai red curry paste
- 2 sweet potatoes, peeled and diced
- 1 can diced tomatoes
- 1 c. vegetable broth
- 2 tsp. salt
- 1.4 tsp. black pepper
- ¼ c. natural peanut butter
- ½ c. lite coconut milk
- 2 Tbsp. chopped cilantro
- lime juice
- 2 c. cooked jasmine rice or rice of your choice
- ¼ c. chopped peanuts, for garnish

Instructions:

Heat the coconut oil in a pot or a large skillet over medium heat. Add the onion and sauté for 5 to 6 minutes until soft and translucent. Add the garlic and red curry paste and stir until fully incorporated with the onions. Add the sweet potatoes, tomatoes, vegetable broth, 1 tsp of salt, and pepper. Increase the heat to high and bring to a boil and then reduce the heat to medium-low. Simmer for 30 to 35 minutes until the sweet potatoes are fork tender.

In a small cup or bowl, whisk together the peanut butter, coconut milk, and remaining 1 tsp. of salt. Pour into the skillet with the sweet potatoes and stir to combine.

Remove from the heat. Add cilantro and lime juice. Serve with the cooked rice and garnish with the chopped peanuts.



School Fuel Chex Mix

Ingredients:

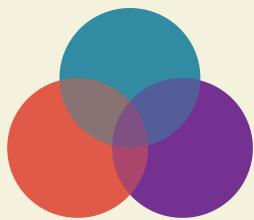
- ¾ c. brown sugar
- 6 Tbsp. butter
- 3 Tbsp. corn syrup
- ¼ tsp. baking soda
- 3 c. rice Chex cereal
- 3 c. corn Chex cereal
- 1 c. pretzels
- ½ c. cashews (optional)



Instructions:

Put the sugar, corn syrup, and butter in a bowl and microwave on high for 1-2 minutes or until the butter melts. Stir in the baking soda and mix well.

In another bowl, mix the cereal, pretzels, and cashews well. Pour the brown sugar mixture over the cereal mixture and stir a little bit. Microwave this mixture for 1 minute and stir well after. Do this twice more, making sure to stir well enough for all the cereal to be covered. Pour the coated mixture onto a baking pan and stir often so it doesn't clump. After about 10 minutes, you can transfer it to a storage container.

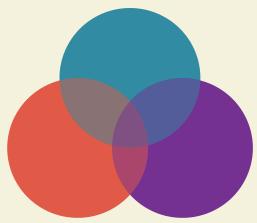


MGB FALL PICNIC



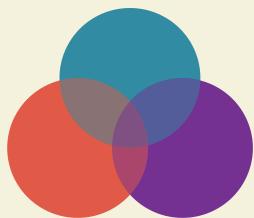
Thank you to Jacob and Kit for organizing this fall's MGB Picnic.
We were overjoyed with the turnout for this splendid annual event.
Here are a few photos. Enjoy!





M G B FALL PICNIC (CONT.)





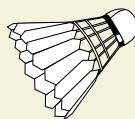
ANNOUNCEMENTS!



If you enjoy physical activities and want to get to know your fellow colleagues in the department better, then I have some good news for you! There are two groups in the department that like to get together and play sports.



One group likes to meet and play volleyball on Saturdays and even join in on intramural volleyball tournaments when we can. We haven't played in a little while, but we would love to resume playing more often. If you are interested, just reach out to Garrett about joining the GroupMe.

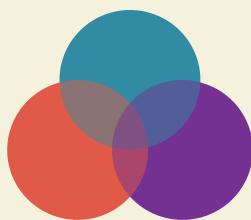


The other group in the department likes to do more racquet-based sports! Typically, that means playing singles or doubles in pickleball; however, we also occasionally branch out and play badminton or even play racquetball if it's a smaller group of people.

If you are interested in playing any of these sports, feel free to reach out to Garrett and a new group chat can be created. Let's stay active!
You can email Garrett at garrett-mason@uiowa.edu.

There's no better way to deal with the stress of graduate school than getting an endorphin high from a productive run and/or experiencing the increased level of endocannabinoids post-run! If you are interested in joining the math department's recreational running group, please reach out to Jessa at jessa-rhea@uiowa.edu to be added to the group chat! Members of the math department have frequently run the Iowa City ParkRun 5k on Saturdays and have enjoyed the local race events together. We plan to schedule a weekly afternoon group run once the weather cools down.





FIRST-YEAR FEATURE!

We asked our first year students about themselves, and here are the stellar responses we received!

What is your name?

Ian Ramsey

What is your hometown?

San Francisco, CA

From where did you get your previous degrees, and what are they?

BA in Math, Applied Math, and CS from Rice University

Why did you decide to come to the University of Iowa?

The school was recommended to me by one of my letter writers. When I visited, I was blown away by just how sociable the department was, and how well the department supports the development of its students.

What is your main research interest right now?

Continuous math (Analysis, Differential Equations, Manifolds) as well as its applications.

What are your hobbies/what do you like to do in your free time?

Figure Skating and Chess. Skating is a healthy way for me to really scratch that itch to improve, and chess fits that same niche, without any real time commitment.

What is your favorite place in Iowa City so far?

Tru Coffee. If I have some free time in the morning, I'll stop in for a dirty chai and read my emails.

What are you looking forward to doing while you're here in Iowa?

I'm looking forward to taking more independence with my studies and pursuing my mathematical interests.

What did you do over the summer?

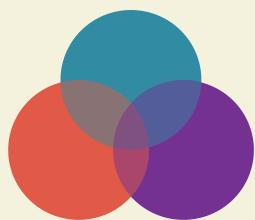
Studying for quals in Analysis and DE. It was quite the endeavor, but it's a miracle what you can accomplish by burning your head in a book for 4 hours a day.

Do you know what you want to do after graduation?

I'm open to a variety of career paths, but it's important to me that I get to work on new and interesting problems.



I am Alperen. My hometown is Adana, Turkey. I got my Bachelor's degree from Middle East Technical University, Ankara Turkey, from Electrical and Electronics Engineering department. I want to do research on Machine Learning. I like playing soccer, swimming, playing basketball, having picnics in my free time. City Park is my favourite place in Iowa so far. I left my job and had some holiday last summer while preparing to come to here. I don't know what to do after graduation yet.



FIRST-YEAR FEATURE! (CONT.)



My name is Fatemeh. I come from Iran; I am originally from Ahvaz, which is located in the south of Iran. My bachelor's and master's were in Applied Mathematics from the Shahid Chamran University of Ahvaz and the University of Tehran, respectively. The excellent facilities and the expert faculty members at the University of Iowa have persuaded me to apply for this Ph.D. program in the Department of Mathematics. I am enthusiastic to collaborate with Dr. Isabel K. Darcy since she is a pioneering researcher in this subject, and her research interests are similar to what I intend to achieve in the future. My hobbies are Zumba class with my friend and swimming. My favorite place is MacBride because it is a great place to relax and walk.

What is your main research interest right now?

Topological Data Analysis (TDA)

What did you do over the summer?

My husband and I went to Seattle because my sister-in-law lives there, and the amazing part for us was that we could go to Microsoft as visitors because my sister-in-law works there. After our travel, I started studying my course for the fall and improved my English.

Do you know what you want to do after graduation?

I would like to be a part of the women's society in science after I graduate.

What is your name?

Bradley Duda

What is your hometown?

Crown Point, Indiana

From where did you get your previous degrees, and what are they?

Purdue University, double major in math and math education

What are your hobbies/what do you like to do in your free time?

I listen to music, play guitar, and go on walks.

What is your favorite place in Iowa City so far?

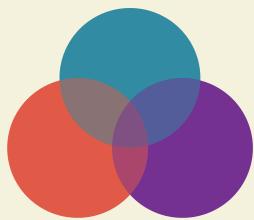
Woodpecker Trail!

What did you do over the summer?

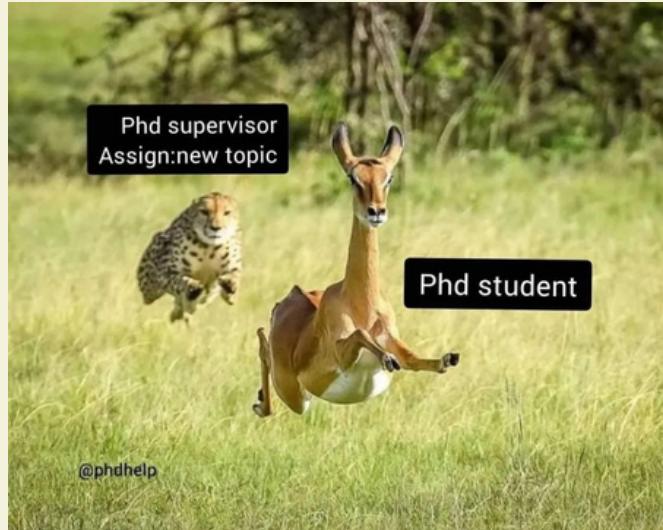
I saw Post Malone live



Welcome



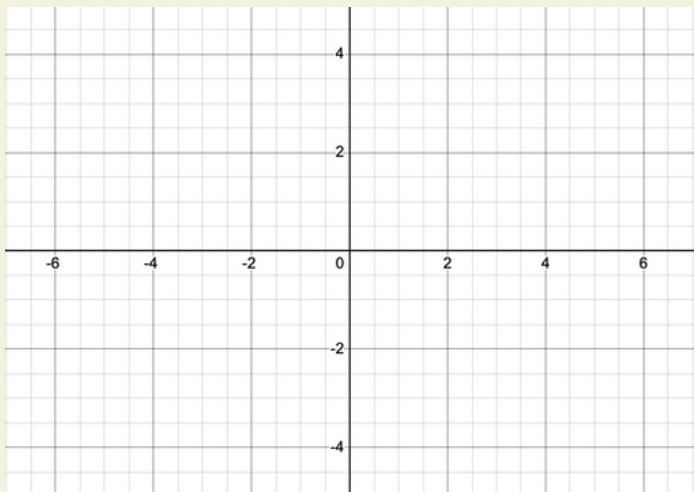
MATH MEMES



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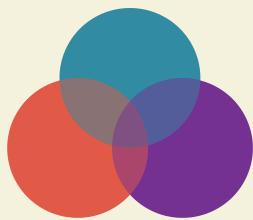
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bank account



Click Here ^



(left) A note from Jessa:
Although this is not a math meme, it is
humorous. This past May at the
Outstanding TA Award Ceremony, the
math department awardees took a few
pictures together. I am (clearly) the
shortest in the group, so Elise single-
handedly picked me up so I could be as
tall as everyone else.



C A L C U D O K U

Calcudoku combines the row and column constraints of Sudoku with numerical regions that are similar - but not identical - to those in Killer Sudoku.

To solve Calcudoku, place the numbers 1 to 9 once each into every row and every column. Further, the given value at the top-left of each **bold-lined** region must be obtained when all of the numbers in that region have the given operation (+, -, ×, ÷) applied between them. For - and ÷ operations start with the largest number in the region and then subtract or divide by the other numbers.

Note that there is no constraint on repeating numbers in **bold-lined** regions.

96×		7×		14+	2÷		18×	
		2÷			35×		8÷	2÷
4÷	16+		42×		13+	5-		
		8×	21×				2÷	2÷
200×			18×		84×			
5-		2÷		3-			16+	3-
	54×		13+	8÷	1-			
15+	21×	3÷			9÷		17+	
			7+		4÷			

<https://www.puzzlemix.com/rules-calcudoku.php>