

The Almagest

The bi-weekly newsletter of the Alma College Department of Mathematics and Computer Science. Your trusted source for news.

Volume 11 No. 10

March 4, 2019



Senior Dinner on Tuesday, March 12th

Our annual dinner for senior mathematics and computer science majors will be held on **Tuesday, March 12th** at 5:30 in the Heather Room. Our dinner has always been a fun event with lots of good food, laughter, and reminiscing. So, please make sure you attend. If you've not yet responded to the invitation sent to you, please contact Jackie Gage (SAC 224) by **Friday, March 8th**.



Senior Presentations

Senior presentations begin next week with talks on **Tuesday** and **Thursday** at **4:00** in SAC 113.

Tuesday, March 12th

4:00 *Ben Elliott*

Thursday, March 14th

4:00 *Melissa Gal*

4:30 *Peter Jonsson*

Tuesday, March 19th

4:00 *Bennett DuBois*

4:30 *Jennifer Davis*

Thursday, March 21st

4:00 *Chenyu Liu*

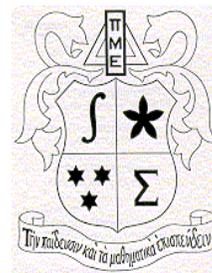
4:30 *Eric Ferrara (Senior Thesis)*

Tuesday, March 26th

4:00 *Cheyenne Kalfsbeek (Senior Thesis)*

Pi Mu Epsilon Gains 6 New Members

Alma College's chapter of Pi Mu Epsilon, a national mathematics honorary, recently added six new members to its ranks. The new members are **Ben Elliott, Callie Jones, Roy Spencer, Allison Shoemaker, Brittany Sommerville, and Katherine Maiville**. Existing members are: **Andrew Borzi, Jennifer Davis, Eric Ferrara, Brianne Giddis, Peter Jonsson, Cheyenne Kalfsbeek, Marcus Malling, Brian May, Melissa Gal, and Mercedes Thill**.



The Math Club Meets on Tuesdays

This term the Math Club will be meeting on **Tuesday evenings** at 9 pm in DOW 132. All lovers of mathematics are encouraged to attend.



Pi Day

On Thursday, **March 14th**, the mathematics community will celebrate Pi Day. Look at what happens when we write π backwards.



Discussion with Dr. Brad Westgate

Dr. Brad Westgate has been a member of the Alma College faculty since 2015. For his undergraduate education, he received a B.S. in Engineering from Olin College. Dr. Westgate then attended Cornell University where he earned his Ph.D. in Operations Research.



“I realized pretty quickly in my undergrad career that I preferred math and computer science to hands-on engineering,” says Dr. Westgate. “After wonderful experiences as a teaching assistant in the Center for Talented Youth program and an undergraduate project in discrete math, I decided to go to graduate school and become a professor.”

“I knew very little about Alma College prior to interviewing here,” says Dr. Westgate. “During my interview I was impressed by the positive culture of the faculty and the students. I liked everyone I met, and it seemed like a place where I could fit in. I was right!”

Currently, Dr. Westgate is working on a project with chess statistics. He is creating forecasts of the career trajectory of chess players based upon their Elo rating—a measure of a chess player’s skill. Among the questions he is working on are estimating how quickly the rating increases during childhood and estimating the probability a player reaches a world-class level.

Dr. Westgate is also collaborating with Dr. Montoye in IPHS on a project predicting the type of physical activity a person is performing and the energy expenditure of this action based on activity monitor data. Also, Dr. Westgate and Dr. Barrese have unexplored interests in the networks of research and teaching collaboration among Alma College faculty. This work would look at the amount of collaboration and how much it is contained to a single field.

“I am happy to work with students also,” says Dr. Westgate who is currently advising me in the completion of my thesis. “If a student has interests in applied statistics or machine learning projects for sport or healthcare statistics, they are welcome to approach me about working together. In the past I have consulted with students on statistics questions for other research projects and I am happy to do that as well.” *Cheyenne Kalfsbeek*

Solution to Previous Puzzle

The following problem appeared in the *Parade* magazine on December 13, 2009.

The following are the first letters of six words:

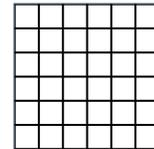
l, w, s, p, c, b.

If the sixth word is “book,” what are the first five words?

letter, word, sentence, paragraph, chapter, book

Puzzle of the Bi-week

A game is played by tossing a single coin onto a large table on which a grid of congruent squares is drawn. Each square is 25 mm on a side, and the coin has a diameter of 10 mm. If the coin lands entirely within one of the squares, the player wins a prize. If the game is designed so that the coin always lands somewhere on the table (the coin can’t roll off the table) **what’s the probability** that a player wins a prize?



A prize of **\$1.00** will be awarded to the 1st student who submits a correct solution to Prof. Sipka.

Student assistant:	Cheyenne Kalfsbeek
Faculty advisor:	Tim Sipka
Distribution:	Jackie Gage SAC 224

If you would like to submit an announcement or a short article, please send it via e-mail to Tim Sipka (sipka@alma.edu).