The Almagest

Alma College
Alma, MI 48801

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

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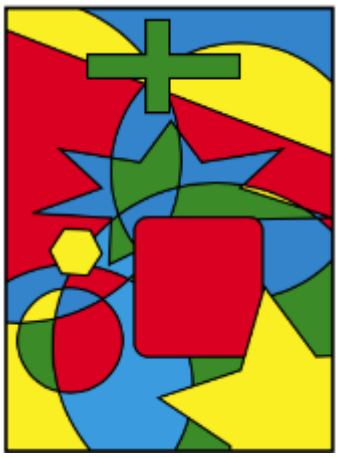
First Colloquium – September 20th

The Four Color Theorem is a simple and believable statement:

At most four colors are needed to color any map drawn in the plane or on a sphere so that no two regions sharing a boundary receive the same color.



It might be surprising to find out that mathematicians searched for a proof of this statement for over a century until finally finding one in 1976. In this talk, ***Professor Tim Sipka*** will consider the "proof" given by Alfred Kempe, a proof published in 1879 and thought to be correct until a flaw was found in 1890. You'll be invited to look carefully at Kempe's proof and see if you can do what many 19th century mathematicians could not do—*find the flaw*.

"A 'PROOF' of the Four Color Theorem"

Date: **Tuesday, September 20th**
Time: 4:00
Place: SAC 113

Refreshments at 3:50.

The Math Club is Back

The Math Club is back and will have its first meeting on **TUESDAY**, September 13th, at 9 pm in Dow 137. If you have questions, please con-tact **Alex Hall** (Pres.) or **Cheyenne Kalfsbeek** (Sec.).

Taco Party

All computer science and math students are invited to the annual taco party on **Monday, September 19th** at Dr. Molina's house. This is always a great time of fabulous food, perplexing puzzles, and deep dialogue. The party starts at 5:30 p.m., but feel free to come a bit later if you have a class that meets in the late afternoon (e.g. Kiltie band). Dr. Molina's house is a short walk from campus at **520 Woodworth Ave**. If you need directions, see Mrs. Smith in SAC 224.

Fall Colloquia Schedule

Make room in your schedule this term for our fall colloquia. The Math & C.S. Dept. has scheduled a series of six interesting talks this term.

Sept. 20: "*A 'Proof' of the Four Color Theorem*"
Prof. Tim Sipka (Alma College)

Oct. 3: "*How did a math major end up as an epidemiologist?*"
Dr. Ganesa Wegienka (Henry Ford Health Sys)

Oct. 20 "*The Mathematics in Automotive Radar*"
Dr. Ryan Jones & Kyle Kolasinski
(Continental Automotive)

Nov. 1: "*Mathematics and Politics*"
Dr. Mike Jones (Math Reviews)

Nov. 15: "*Can we do better than Fitbit?*"
Dr. Alex Montoye (Alma College)

Dec. 1: "*Robotics to Reach Out and Change the World*"
Dr. Chad Jenkins (Univ. of Mich.)

All talks begin at 4:00 in SAC 113.

Why Pursue the Study of Mathematics?

Math has always been something that I enjoyed. At a young age I recall my sister and I sitting together as she taught me multiplication. These memories date back to first grade, and ever since I have adored the subject. When I became bored with the school's curriculum, it was to math and advanced courses that I looked in search of a challenge.

Besides the way that math has served me personally, it's simply a beautiful topic. Everything within its bounds fits together and builds upon itself in a truly remarkable way. Not to mention, mathematics is present all throughout our daily lives. Most human actions are presided over by nothing more than simple math. By way of more complex math, every scene that our eyes take in can be recreated. To say the least, mathematics is an intricate and spectacular science.

The study of mathematics is prosperous to more than the soul however. An undergraduate degree in math is good preparation for a career in a large array of fields. Both reasoning and problem solving skills are birthed and nurtured by the environment provided by mathematics. These skills are considered assets in many people such as: engineers, actuaries, statisticians, and software developers.

However, graduate schools admit to finding undergraduate majors in math a good fit for more than those pursuing such careers. Medical, law, and business schools all look favorably upon math majors. An undergraduate major in math can take you nearly anywhere. Minoring in math can also be beneficial in displaying a depth of knowledge, the ability to problem solve, and proving an individual well-rounded.

Those looking for additional resources related to careers in math should explore the American Mathematical Society webpage at www.ams.org.

Another fine resource in career planning would be the Bureau of Labor Statistics publication titled Occupational Outlook Handbook. This can be found at http://www.bls.gov/ooh/. *Cheyenne Kalfsbeek*

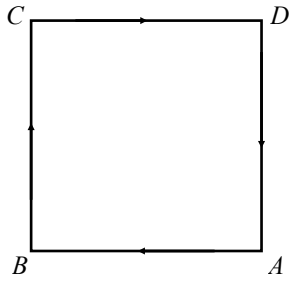
Where's Maple?

Maple 2016, the computer algebra system used in all sections of calculus, is located in the following labs:

SAC 212:	17 mac desktops (C.S. lab)
SAC 117:	16 mac desktops & 20 laptops
Kapp 160:	3 mac desktops & 10 laptops
Kapp 151:	8 mac desktops (P-Chem lab)
Library:	11 pc desktops in *Olofsson* room
	10 pc desktops in basement lab

Puzzle of the Bi-week

Suppose four towns are located at the four corners of a square. You start driving from town A and make a round trip at the following speeds: 30 mph from A to B, 40 mph from B to C, 50 mph from C to D, and 60 mph from D to A. What is the ***average speed*** of your round trip? The answer is not 45 mph.



A prize of **$2.00** will be awarded to the 1st student who submits a correct solution to Prof. Sipka.

Student assistant:	Cheyenne Kalfsbeek
Faculty advisor:	Tim Sipka
Distribution:	Deb Smith

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