

The Almagest

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

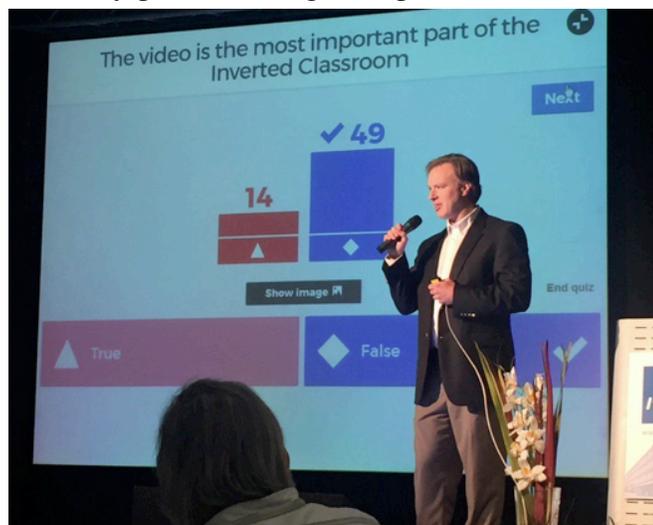
Volume 8, No. 10

March 7, 2016

Alma College
Alma, MI 48801

Steve Kelly Gives Keynote Address

Steve Kelly, an Alma alum and veteran math teacher, recently represented Alma College as the keynote speaker at the international *Inverted Classroom Model and Beyond* conference hosted by the Austrian University of Applied Sciences in Vienna, Austria. Inverting/flipping the classroom is a model in which the typical lecture and homework elements are reversed. Students watch short video lectures before class, while in-class time is devoted to working on problems. Steve developed his flipped learning skills as a high school math teacher over the past 25 years. Currently, he's teaching math and coaching track at Alma College. While visiting Vienna, Steve was given the chance to observe and teach in a high school that has just started using the flipped model. He was also asked to share his teaching experiences with a group of university profs working with pre-service teachers.



You can find a summary, in German, of the post conference visits and photos at:

<http://podcampus.phwien.ac.at/zli/archives/2662>

You can also listen to Steve's keynote address for the conference at: [youtube/GepliW8PHqg](https://www.youtube.com/watch?v=GepliW8PHqg)

Senior Presentations

Senior presentations begin next week with talks **on Tuesdays and Thursdays at 4:00** in SAC 113 and with an occasional talk on a **Monday**. Here are the first few talks.

Tuesday, March 15th

Joanna Delpaz: *Solving the Cubic*

Jared Dennis: *Agricultural Technology*

Thursday, March 17th

Julian Birge: *Generalization of Buffon's Needle*

Laura Kelly: *Group Theory and Cross-Stitch*

Monday, March 21st

Jace Buell: *Data Encryption*

Allison Smith: *The Art Gallery Problem*

Tuesday, March 22nd

Jamey Paron: *The Monty Hall Problem*

Lillie Miller: *Game Theory*

Thursday, March 24th

Jeremy Weber: *Fourier Series*

Jason McKelvey: *Scheduling Problems in Graph Theory and Combinatorics*

Senior Dinner on Tuesday, March 15th

Our annual dinner for senior mathematics and computer science majors will be held on **Tuesday, March 15th** 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 Deb Smith by **Friday, March 11th**.

Math Competition on April 9th

The *Lower Michigan Math Competition* will be held on Saturday, **April 9th**, at Hope College. This is a team-oriented competition similar to the MATH Challenge, a competition that we sponsor in the fall term. If you're interested in participating, please see Prof. Sipka.

The Math Club

Although Pi Day is officially March 14th, the Math Club will be celebrating the occasion on **Saturday, March 12th** at 2:00 pm in the Dow Science building. Activities will include: a math trivia game, a hula hoop contest, a 14 meter dash, and everyone's favorite: a pie eating contest.

On **Wednesday, March 9th**, the math club will meet at Wright Hall at 9:00 pm, and then head over to Prof. Sipka's house for a time of fun, FOOD, and games.



Need a Spring term course?

Spring term is a great time to take an interesting course that counts toward your major or minor. This May we're offering two such courses.

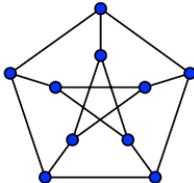
CSC 235 Computer Game Design (Dr. Thall)

This course explores the process by which computer games go from conception through formal design to implementation and testing. The prereq is CSC 220 or permission.



MTH 391 Intro to Graph Theory (Prof. Sipka)

This course introduces the major concepts and applications of graphs, digraphs, and networks. Application areas will include transportation, games, and puzzles. The prereq is MTH 122 or permission.



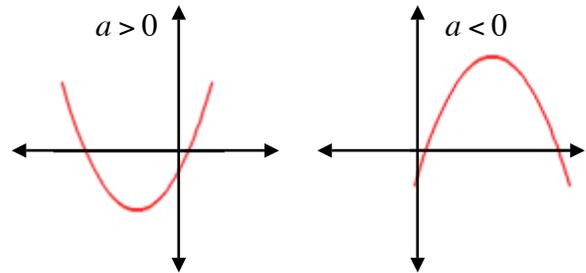
To register for a Spring term course, simply fill out a **DROP/ADD** form, signed by your advisor, and take it to the Registrar's office in the basement of Hamilton.

Puzzle of the Bi-week

Evidently \$2.00 is not enough of an incentive to entice the mathematically curious student to attempt our bi-weekly problem: there were no submissions for our last problem. SO, in an effort to increase business, a **\$5** reward will be given to the student who nails the following problem.

Let $f(x) = ax^2 + bx + c$, where a , b , and c are *integers*. Now, suppose $f(1) = 0$, $40 < f(6) < 50$, and $60 < f(7) < 70$. The question is:

What is $f(8)$?



A prize of **\$5.00** will be awarded to the 1st student who submits a correct solution to Prof. Sipka.

Student assistants: Christine Wiersma/Jacob Blazejewski
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).