



St. Olaf Mathematics Department

# Math



# Mess

Department of Mathematics  
St. Olaf College  
Northfield, MN 55057

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## This Week's Mathematics Colloquium

Title: From Numbers to Curves and Back Again:

An Introduction to Elliptic Curves

Speaker: David Romano

Time: Thursday, Jan 14<sup>th</sup>, 2 p.m.

Place: SC 186

### This Week's Colloquium

This week's speaker comes from the other side of the tracks. David Romano, a professor at Carleton, will initiate us into the wonders of elliptic curves. Here's what he has to say about his talk:

"Many questions in number theory begin their lives as questions about numbers, but are then transformed into questions about curves as attempts are made to answer them.

In the talk I will trace this transformation for a particular question about numbers as a way of introducing and illustrating the subject of elliptic curves. No background will be assumed other than a familiarity with graphing and factoring polynomials."

### It's a Boy!!!

Congratulations to Dr. Doreen Dumonceaux Hamilton and her husband on the birth of their new baby boy! His name is Andrew Parker and he arrived as a 7 lb. 8.2 oz bundle of joy on December 27, 2001 (approximately 11:06 pm.). Congratulations again and here's hoping that someday he'll do some great math. ☺

### Gertrude Cox Scholarship

The Gertrude Cox Scholarship, established in 1989, is awarded each year to encourage women to enter statistically oriented professions. The ASA Committee on Women in Statistics and the Caucus for Women in Statistics sponsor the scholarship.

Applicants for the scholarship are limited to women who are citizens or permanent residents of the United States or Canada, and who are admitted to full-time study in a graduate statistical program by July 1 of the award year. Women in or entering the early stages of graduate training (M.S. or Ph.D.) are especially encouraged to apply.

If you want more information and/or an application, you can visit:

[www.amstat.org/awards/cox-scholarship.html](http://www.amstat.org/awards/cox-scholarship.html)

## Konhauser Problemfest

Problem solving in the hizzouse! The event you have all been waiting for, the Konhauser Problemfest, bringing together students from St. Olaf, Macalester, C\*\*\*\*\*\*n, St. Thomas, and Gustavus, will take place on Saturday, February 23rd. Teams of three work on ten problems for three hours, and the winning school takes home the granite pizza trophy.

We can bring as many teams as we like - last year we had 7 1/3, which was outstanding. The total time commitment would be from about 7:30am to 4pm - we have to travel to (and from) St. Paul. Breakfast and lunch will be provided.

There will be two drop-in practice sessions for this contest – Wednesday the 13th and 20th from 7 to 9pm in SC182. We will have copies of all of the old Problemfests.

If you are interested in participating or you already have a team of three, send e-mail to molnar. You can also ask to be placed on the "math-probsolv" mailing list.

## Last Week's Solution

The solution to the Problem of the Week from the December 6 edition of the Math Mess will run next week. Here is a reminder of the problem, however, in case you still want to try your hand at it...

**Last week's problem:** If  $n$  is a positive integer which can be expressed as  $a^2 + b^2 + c^2$  where  $a$ ,  $b$ , and  $c$  are positive integers, prove that  $n^{2k}$  can be written in the same form.

## Problem of the Week

24 senior math majors still need to take their core course. Currently 7 are signed up for Humke's Real Analysis, 8 are signed up for Molnar's Combinatorics, and 9 are signed up for Zorn's Wavelets. None are taking more than one of these courses, or has any intention to do so. Whenever two of these students meet who are signed up for different core courses, they both decide to drop the course they are in and add the third. Is it possible that in this way all 24 will end up in the same course?

\*\*\* Please submit all solutions to Cliff Corzatt ([corzatt@stolaf.edu](mailto:corzatt@stolaf.edu)) by noon on Friday.

If you would like to receive a copy of the Math Mess in your P.O. Box weekly, please e-mail Donna Brakke at [brakke@stolaf.edu](mailto:brakke@stolaf.edu).

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