

Augarithms



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March 7, 2005

Mark your calendar. . .

Mathematics Colloquia Spring 2005

Mathematics colloquium talks are Wednesdays 3:40-4:40 p.m. in Science 108. Refreshments are provided.

Jan. 26 Dr. Nicholas Coult, Augsburg College

Feb. 9 Dr. Terrance Hurley, Dept. of Applied Economics, University of Minnesota

Feb. 23 Dr. Brian Loe, Lockheed Martin Corporation

Mar. 9 Profs. Tracy Bibelnieks, Blake Boursaw and Matthew Haines, Augsburg College

Apr. 6 TBD

Apr. 13 TBD

Apr. 27 TBD

Three Slices of Pi

Tracy Bibelnieks, Blake Boursaw
and Matthew Haines
Augsburg College

The number π can be defined as the ratio of the circumference of a circle to its diameter. But there are many more geometric interpretations and computational techniques of this often studied, mysterious number. In this week's mathematics colloquium three of Augsburg's own will share stories of the number π . In "Circling the Triangle," Blake will discuss the area of an ideal hyperbolic triangle. Matt will describe the famous problem of

"Squaring the Circle" and some history of computing π . Tracy will present the idea behind Buffon's Needle, a probabilistic method for approximating π .



Clockwise from left: Andy, Dean, Binh, Cory, and John waiting on their results in this year's Könhauser Competition held Saturday February 28th at Carleton College. For this year's and past problems see <http://www.macalester.edu/~mathcs/potw.html>



Augarithms is available on-line at ausburg.edu/math/augarithms/. Click on the date you want to see.

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*The Bi-weekly Newsletter of
the Department of
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Pi Day is 3.14

Join Unbounded, Augsburg's Math Club on Monday March 14th for a fundraiser for "Ride the Wave of Giving" Augsburg College's Tsunami Relief Project.

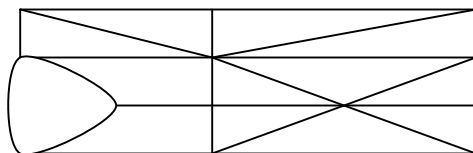
- π **Noon-3:14:15 p.m. "Pi Recitation" Christensen Coffee Commons.** Augsburg students will seek pledges to read digits of pi. Pledges must be in multiples of pi to the nearest cent.
- π **3:30 p.m. "Throwing Pi" The Quad (Century Room if poor weather).** Toss mini-cream pies at your favorite Augsburg faculty/staff for a small donation.

For more information on Unbounded activities contact greenh@augsborg.edu.

Organizing committee: Heather Greene (Pres.), John Staton, Heather Nystrom, Dan Wolf (VP), and Chrissy Piram.

Topic's Topic = Graph Theory

The city wants to snow plow each of the streets of the neighborhood drawn below just once down the middle of each street, starting and ending in the lower right-hand corner. Will they need to repeat any streets? If so, what's the minimum number of repeats?



Interested? Consider taking MAT 395: *Topics in Mathematics* next Fall (2005) on graph theory with Prof. Su Dorée. It will be a mix of the usual lecture-discussion-homework-exams and seminar-style work on mini research projects. The prerequisite is just MAT 271. It's a great topic for students majoring in CSC as well as MAT and suitable for MAT minors.

A Real Page-Turner?

The 415 pages of J. Guilloud and M Bouyer's treatise "1000 000 pi, commissariat à l'Énergie Atomique" (1974) contain the first million decimal digits of pi. It keeps you guessing right up to its final 58151.

As easy as 1, 2, 3?

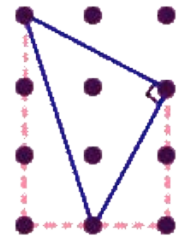
What's

$$\begin{aligned} &\text{Arctan}(1) + \\ &\text{Arctan}(2) + \\ &\text{Arctan}(3) ? \end{aligned}$$

(Everything's in radians, of course).

Courtesy of

<http://www.math.hmc.edu/funfacts>



Statistics Lab: The Pepsi Challenge

We may be a "Pepsi Campus", but do Augsburg's students really prefer Pepsi Cola® over Coca Cola®? That's the question MAT 163 students worked to answer in a recent lab in Prof. Dorée's class as part of their study of the use of paired design in experiments.



Which will she pick? Ryan records Becky's choice.