

# The Almagest

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

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Alma College  
Alma, MI 48801

## **Mathematics Colloquia**

Please make time on Tuesday afternoons to attend the two mathematics colloquia we've scheduled in January. **Dr. Robert Roe**, Alma College's Director of Institutional Research, will give our first talk. **Dr. Peiru Wu**, the Director of the Industrial Mathematics program at Michigan State University, will give our second talk.



### *"Mathematics and Humor"*

Presenter: Dr. Robert Roe  
Date: **Tuesday, January 19<sup>th</sup>**  
Time: 4:00  
Place: SAC 216

*Refreshments at 3:50.*



### *"The Industrial Mathematics Masters Program at Michigan State"*

Presenter: Dr. Peiru Wu  
Date: **Tuesday, January 26<sup>th</sup>**  
Time: 4:00  
Place: SAC 216

*Refreshments at 3:50.*

## **Mandatory Meeting for Seniors!**

All *senior math majors* are required to attend a short meeting on Friday, January 15<sup>th</sup> at 4:00 to discuss the senior presentation. This meeting will help to clarify a variety of issues and provide answers to questions you may have about your senior presentation.

Please make every effort to attend this meeting on **Friday, January 15<sup>th</sup> at 4:00 pm. in SAC 216.**

## **Juniors: Time to think about an REU**

Have you ever contemplated doing graduate study in mathematics or computer science? Would you like to "test the water" and see if grad school might be the right thing for you? If you're a *junior* wrestling with these questions, then please consider applying for a summer REU (Research Experience for Undergraduates). This is a great opportunity to spend 7 or 8 weeks of the summer working on some interesting project in mathematics or computer science. And to make it even more attractive, you'll receive a stipend of approximately **\$2500** in addition to free room and board. There are numerous REU's dealing with a wide variety of topics such as mathematical biology, knot theory, statistical genetics, cryptography, machine learning, cryptography, actuarial science, combinatorics, and graph theory. For more information, check out the following web site: [www.ams.org/employment/reu.html](http://www.ams.org/employment/reu.html)

## **Summer Math Program for Women**

An intensive four-week summer mathematics program for eighteen talented undergraduate women will take place at Carleton College in Northfield, Minnesota, **June 20 -- July 18, 2010**. The courses will be in two areas not normally covered in an undergraduate curriculum. The students will immerse themselves in mathematics, living and working in a supportive community of women scholars (undergraduates, graduates, and post-graduates) who are passionate about learning and doing mathematics. The program's intent is three-fold: to excite these young women about mathematics, to provide them with the tools they will need to succeed in higher-level mathematics, and to connect them with a network of fellow

female mathematicians. To be eligible for this program, applicants must be female mathematics students who are finishing their *first* or *second* year of undergraduate work, who have completed linear algebra but have not completed more than one year of mathematics past linear algebra, and who are U.S. citizens. Deadline: **February 19, 2009**. For more info, visit: [www.math.carleton.edu/smp/](http://www.math.carleton.edu/smp/).

### Math Humor

A biologist, an engineer, and a mathematician were sitting outside an empty house. They saw two people go in, and a while later, three people came out. The engineer said, "Our initial count must have been wrong." The biologist said, "They must have reproduced." The mathematician said, "Now, if one person goes back into the house, it will be completely empty!"

### Mathematical Minutiae

**8** is the only cube that is one less than a square.

**Forty** is the only number with all its letters in alphabetical order.

**One** is the only number with all its letters in reverse alphabetical order.

### New at the Alma College Library

*Naive Decision Making: Mathematics Applied to the Social World* by T.W. Körner

How should one choose the best restaurant to eat in? Can one really make money at gambling? Or predict the future? *Naive Decision Making* presents the mathematical basis for making decisions where the outcome may be uncertain or the interests of others have to be taken into consideration. Professor Körner takes the reader on an enjoyable journey through many aspects of mathematical decision making, with pithy observations, anecdotes and quotations. Topics include probability, statistics, Arrow's theorem, Game Theory and Nash equilibrium. Readers will also gain a great deal of insight into mathematics in general and the role it can play within society.

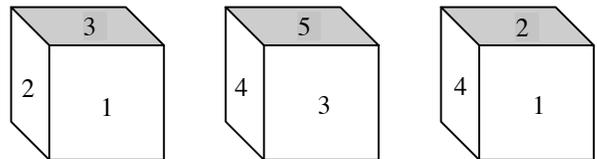
(Cambridge University Press.)

### Quote

"A mathematician is a machine for turning coffee into theorems." **Paul Erdős**

### Puzzle of the Bi-Week

Three views of the *same* numbered cube are shown below. One number actually occurs twice on the cube. Also, the number that appears twice is *not on the bottom* of any of the views. What number appears twice? Please explain.



The first student to submit a correct solution to Professor Sipka will receive a small (and I mean very small) prize.

Student assistant:	Matt Mansell
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 Matt Mansell (11mgmans) or Tim Sipka (sipka).