This Week's Colloquium

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<th>Title:</th>
<th>Idempotents à la mod.</th>
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<td>Presenter:</td>
<td>Tom Sibley</td>
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<td>Date:</td>
<td>Tuesday, April 14th</td>
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<td>Time:</td>
<td>1:30 pm</td>
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<td>Location:</td>
<td>SC 188</td>
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About the talk: In ordinary algebra, the equation $x^2 = x$ has just two solutions, $x = 0$ and $x = 1$. Such solutions are called "idempotents." During this talk we will change the rules of multiplication and explore what can happen. Come "armed" with paper, a pencil and your inquisitiveness for our investigation.

About the speaker: Tom Sibley comes to St. Olaf from the Department of Mathematics at St. John’s University.

Kleber-Gery Lecture

Dr. Anna Nagurney  
Thursday, April 16  
8:00 pm  
RNS 390

Every year the Departments of Economics and Mathematics, Statistics and Computer Science jointly host a prominent national scholar for a special evening lecture of interest to the students and faculty of both departments. This year's Kleber-Gery Lecture is scheduled for 8:00pm on Thursday evening, April 16th, in Regents Hall 390. The title of this talk is: *Synergies and Vulnerabilities of Supply Chain Networks in a Global Economy: What We Can Learn from Half a Century of Advances in Transportation.*

This year's speaker, Dr. Anna Nagurney, the John F. Smith Memorial Professor, Director of the Virtual Center for Supernetworks and Director of the Supernetworks Laboratory for Computation and Visualization at the University of Massachusetts-Amherst, teaches in the Department of Finance and Operations Management in the Isenberg School of Management.

Prof. Nagurney and our own Steve McKelvey attended graduate school together at Brown University, where both shared the same PhD adviser, the late Professor Stella Dafermos. Her talk, suitable for a general audience, concerns measuring the health and robustness of supply chain networks supporting raw material and finished goods transport. These networks form the fundamental infrastructure of international trade.

Professor Nagurney's lecture is funded by the Kleber-Gery Lecture Fund, established by an alumnus of St. Olaf College in honor of Professors Emeriti Richard Kleber and Frank Gery. The generosity of this friend of the college allows the Economics and Mathematics, Statistics, and Computer Science departments to sponsor one or
two speakers each year who bring expertise of interest to both departments.

**CIR Recognition**

The Center for Interdisciplinary Research (CIR) was recently recognized in a news article on the St. Olaf front page for its contribution to a sociological quantitative research class. Three members of the CIR, Seth Huiras, Kate Virkler, and Elizabeth Zahn served as statistical consultants for the students doing sociological research, helping groups plan their survey, analyze the data and determine what to include in the presentation of their research, as well as performing their own analysis.

Go to the following link for the full story: http://fusion.stolaf.edu/news/index.cfm?fuseaction=NewsDetails&id=4620

**MAA Elections**

It's time to elect next year's St. Olaf Math Association of America (MAA) executive council! The executive council consists of 7 members: president, vice-president, treasurer, and senior, junior, sophomore, and first-year class representatives. The current executive council is:

**President:** Jonathan Woolums  
**VP/Treasurer:** Dan Mork  
**Junior Rep:** Alyssa Frazee  
**Sophomore Rep:** Mat Deram  
**First-Year Rep:** Amanda Elling

All positions except first-year representative will be elected this spring. You MUST be a returning student to be on the executive council. Please contact Jonathan Woolums (woolums@stolaf.edu) by Friday, April 24th if you wish to run for a position.

**Bowling with the Profs**

It’s time for the spring edition of Bowling with the Profs. You and some of your MSCS professors can be seen bowling at Jesse James Lanes on **April 14th at 6 P.M.** The MSCS department will cover the cost of shoe rental and the first game bowled; additional games are at your own expense. If you want to go, or if you can help drive, please contact Jonathan Woolums (woolums@stolaf.edu) ASAP to coordinate transportation. Woohoo bowling!

**Science Symposium Poster Session**

MSCS majors are invited to present a poster on individual or summer research at the poster session associated with the St. Olaf Science Symposium on **Friday May 1st**. Presenters are invited to attend a banquet that evening.

If you are interested in the poster session, email Dr. Beussman (beussmad@stolaf.edu) indicating you wish to participate. Abstracts and posters will be due later in April. For those also interested in the banquet, RSVP at the following link: www.stolaf.edu/events/sciencesymposium/rsvp.html

**Problem of the Week**

Let $a$, $b$, and $c$ be the sides of a triangle with perimeter 2. Prove that

$$\frac{3}{2} \leq a^2 + b^2 + c^2 + 2abc < 2.$$ 

Solutions to last week’s problem are posted at SC 222. Send your solution to this week’s problem to Prof. Gower (SC 222, gower@stolaf.edu) by Friday, April 17, 2009.