

# MSCS MESS

Department of Mathematics, Statistics, and Computer Science  
St. Olaf College, Northfield, MN 55057  
December 1, 2017 | Volume 46, No. 10

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## CS Senior Capstone Seminar

Where: RNS 310

When: Monday, Dec. 4th | 3:30 p.m.

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### Cell Phones in the Theater

*Deandre Bauswell, David Ellenberger, and Elija Verdoom* will demo a system that supports cell phone interaction with appropriate shows, developed for Prof. Todd Edwards. Special guest appearance by a collaborating HiPerCiC team.

### Expanding to the Cloud

*Josh Becker, Jesus Caballero, Andrew Lee, and Scott Nesbit* are creating ways to deploy and manage Beowulf clusters and other distributed systems that can include both remote and local computers, using cutting-edge Kubernetes technology.

### Exploring the Fourth Dimension:

#### What does a 4D cube look like?

*Justin Pacholec, Tian Tian Pang, Joe Peterson, and Omar Shehata* will demo a web app to help us visualize and analyze 4D geometric shapes, developed for Prof. Paul Humke.

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## Next Monday's Colloquium

From Space Operas to Medical Residents:  
the Gale-Shapely Algorithm for Stable  
Matching

Whom: Lisa Langsetmo (UMN)

Where: RNS 310

When: Monday, Dec. 11th | 3:30 p.m.

**About the talk:** In this three part talk I will talk about what makes bone strong. I will do this using conceptual ideas from three very different areas of research: 1. Mathematics (in particular Algebraic Topology) 2. Medicine (Osteoporosis, with some tangents related to image processing and biomechanics). 3. Epidemiology (with some statistical sidelines). This will be an introductory talk with the intention to give you the flavor of how mathematics and statistics are related to healthy aging, which is my primary area of research. These seemingly unrelated areas all come together to aid in the understanding of what makes your bones strong and what ultimately fails as you get older.

**About the speaker:** Uff-da! I could pass the usual tests for being a Minnesota native but have spent a

**(cont.)** great deal of time in "la belle province" learning to speak French with a funny accent. I have a Ph.D. in mathematics and an M.Sc. in Epidemiology and would love to meet with the students prior to the talk.

**The Math Club Presents:  
Jingle Bell Curves Holiday Event**

Come take a festive break from classes with Math Club and Pi Mu Epsilon! During Chapel and Community Time on **December 7th** we will be serving hot chocolate and treats while making snowflakes in the Regents Math 3rd Floor Lounge! We hope to see you there!

**Books, Books, Books!**

Can you read? If so, books might be for you! The MSCS faculty have graciously decided to give away a collection of books that were donated to the department several years ago by a friend of the college. It is an eclectic collection, primarily math, but also some books on science, particularly physics, and psychology. Whether you are looking for a gift or a treat for yourself, stop by RMS 600 whenever the room is open to pick up a few books.

**Math T-Shirt Design Contest!!!!**

For those of you who have an especially calculated love for art, an arithmetically aesthetic sense of beauty, or just a cool

*To submit an article or event for publication in the mess, email [nevilleq@stolaf.edu](mailto:nevilleq@stolaf.edu); to receive the Mess digitally each Friday, email [habero1@stolaf.edu](mailto:habero1@stolaf.edu); visit <http://wp.stolaf.edu/mscs/mscs-mess/> for a digital archive of previous MSCS Mess issues.*

idea for a t-shirt, this is the contest for you! Email a two-color max, short sleeve t-shirt design to [roiger1@stolaf.edu](mailto:roiger1@stolaf.edu) by **December 5th**. The winner will receive fame, acumen, acclaim, and be justly rewarded with a free t-shirt & pause pizza.

**PME Applications**

A reminder that the Math Honors Society, Pi Mu Epsilon, is accepting applications until **December 5th**. Requirements for joining PME are as follows: an overall GPA of at least 3.0, a math GPA of at least 3.5, and at least one transition course completed by the end of the Spring semester (i.e., Real, Abstract, MCM). Apply now on this [Google form](#) !

**Weekly Riddle**

**Q:** If Sally sells sea shells by the sea shore, at a rate proportional to the amount of shells she has, how many shells will she sell over time?

**A:** Who knows! We'll need an ini-shell condition to solve this different-shell equation.

Quinton Neville, Editor  
William Grodzicki, Adviser  
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