

# MSCS MESS

Department of Mathematics, Statistics, and Computer Science  
St. Olaf College, Northfield, MN 55057  
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## Friday's IDEAS Talk

Title: Increasing Diversity and Excellence Across STEM  
Speaker: Francis Su  
Time: Friday, April 7  
Talk: 11:00-11:45am  
Lunch: 12:00-12:45pm  
Place: RNS Atrium, 4<sup>th</sup> floor  
RSVP: email [habero1@stolaf.edu](mailto:habero1@stolaf.edu)

**About the event:** The IDEAS distinguished speaker series is a joint effort between St. Olaf and Carleton to celebrate the achievements and perspectives of scientists and mathematicians traditionally underrepresented in these fields. Specifically, the speaker series aims to bring women, racial minorities, and LGBTQA+ scientists and mathematicians, in addition to those with low-income or first-generation-in-college backgrounds, to Carleton and St. Olaf. This series is an opportunity for all Carleton and St. Olaf students to network and explore the multitude of pathways that lead to success. To sign up for the lunch, visit <https://www.broadeningthebridge.org/ideas/>

**About the speaker:** Dr. Francis Su is the Benediktsson-Karwa Professor of Mathematics at Harvey Mudd College and a former President of the MAA (Mathematical Association of America). Francis Su has a passion for teaching and popularizing mathematics—hear him speak about reaching beyond traditional (and often unintentional) borders of participation in STEM. Let him share his love of mathematics with you.

## Friday's Research Seminar

Title: Responses to the Prescription Opioid Epidemic  
Speaker: Matthew Richey  
Time: Friday, April 7, 3:40pm  
Place: RNS 204

**About the talk:** Levels of prescription opioid abuse are an all time high. As a response, there have a variety of state-level responses to addressing this epidemic. In this talk, we will look the effects of programs and policies in Florida that provide evidence that such policies can be effective. In particular, we will discuss the use of techniques such as Multivariate Adaptive Regressive Splines (aka MARS) as a means of describing and modeling the data

**About the speaker:** Matt is originally from Kentucky and received his B.A. from Kenyon College and his Ph.D. from Dartmouth. He came to St. Olaf in 1986 and has been here ever since. His areas of research are Applied Mathematics, Mathematical Computing, and Bayesian Computational Statistics. In addition, Matt has designed and implemented software for the industry, and is a consultant to the colleges efforts to redesign the student information system. In his spare time (the little that remains) Matt enjoys running, listening to music, and cooking. He is also involved in a life-long effort to correct the commonly held belief that the sacrifice bunt in baseball is an effective strategic ploy. So far, he has failed.

## Monday's CS Student Colloquium

Speakers: Senior CS students

Time: Monday, April 3, 3:30-4:30pm  
(refreshments at 3:15pm)

Place: RNS 310

**About the event:** Ever wonder what St Olaf CS students are doing these days as undergraduate research? Come on Monday to hear about recent team projects in the *Capstone* seminar (CS 390) and in *Parallel and Distributed Computing* (PDC) during Fall '16 and Interim '17!

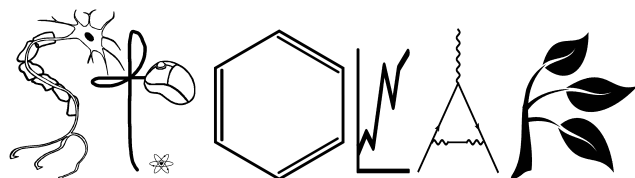
### About the talks:

- *10Gb Networking for St. Olaf CS*, given by Stephen Akers '17, Rachel Frantsen '17, and Eric Oseid '17
- *The Rust Programming Language*, given by Conrad Parker '17, and Omar Shehata '18
- *Designing and building WebMapReduce 2.0*, given by Chris Hinton '18 and Anders Wahlberg '17
- *Spark and More on the Google Cloud Platform*, given by Maggie Connell '17 and Phil Nadolny '17
- *HiPerCiC Apps in Containers*, given by Andrew Altmaier '17, Josh Carlin '17, and Jonathan Featherstone '17
- *BioPhi: Reproducing High-Performance Biological Computations on the Intel Xeon Phi*, given by Jake Caswell '17, Brianna Cunniff '17, and Phil Nadolny '17
- *Videos for Learning CS with a Raspberry Pi and your Laptop* given by Jesus Caballero '18 and Margaret Zimmermann '18

### Science Alliance t-shirts

Please consider supporting the Science Alliance in this year's fundraiser! Science Alliance is a STEM outreach program that brings

fun, hands-on science and math to local elementary and middle schoolers. The group is selling t-shirts (\$12) and stickers (\$3) with the design below to raise funds for supply maintenance and new curricula. To purchase an item, email [sciencealliance-co@stolaf.edu](mailto:sciencealliance-co@stolaf.edu)!



### *Hidden Figures* at Olaf and Carleton

This weekend, *Hidden Figures*, a 2016 film that explores the stories of black women mathematicians and engineers working for NASA at the height of the space race, will screen at both St. Olaf's Viking Theater and Carleton's Weitz Cinema. St. Olaf will show the film at 5pm, 7:30pm, and 10pm on the evenings of Friday, March 31<sup>st</sup> and Saturday, April 1<sup>st</sup>. Carleton will show the film on Sunday, April 2<sup>nd</sup> from 1-3pm, followed by an hour-long discussion about underrepresented groups in STEM fields and particularly the issues faced by women and POC. The discussion is hosted by Women in Physics (WiPs), Women in Math and Science (Whims), LoveLace, and Diversity and Inclusivity in Physics. For questions regarding the Carleton event, email [khanz@carleton.edu](mailto:khanz@carleton.edu)

### The book giveaway continues

Past and present MSCS faculty have pruned their libraries and want to find new homes for the books they removed. A wide range of topics from calculus to graduate level texts is on display in the 6<sup>th</sup> floor lounge of RMS.

### Women's history in MSCS

March is Women's History Month, and in celebration we at the Mess would like to offer a bit of math history to indicate the depth of women's contributions to mathematics, statistics, and computer science. This week, we explore the accomplishments of Lynn Conway,

an American computer scientist and activist for trans visibility and rights.

Conway most famously set the groundwork for much of contemporary microelectronic chip design, sparking progress in academia and industry that remains important today. Not until later in her career, however, did it become known that Conway had also done groundbreaking work at IBM in the 1960s that led to the creation of the first superscalar computer and informed the production of PC chips. Because Conway worked at IBM before transi-

tioning and changing her name, this early work has only more recently been accredited to her; after transitioning: stigmatization of trans individuals would have endangered Conway's life had she transitioned while in the spotlight.

In spite of continued stigmatization, Conway has embraced her visibility to advocate for women and trans folk in STEM fields. To see some of her scholarship and activism, visit her University of Michigan homepage at <http://ai.eecs.umich.edu/people/conway/conway.html>

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

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