

MSCS MESS

Department of Mathematics, Statistics, and Computer Science
St. Olaf College, Northfield, MN 55057
March 10, 2017 Volume 45, No. 21

Pi Mu Epsilon Induction Talk

Title: Oh, the places you'll go! How curiosity, engagement and experimentation can lead you on a deep mathematical journey.

Speaker: Tina Garrett

Time: Monday, March 13, 3:30pm

Place: RNS 310

About the event: This coming Monday, PME will induct new members in a gathering starting with a colloquium lecture by department chair Prof. Tina Garrett, followed by an induction ceremony presided over by Prof. Kos Diveris. Inductees are encouraged to dress nicely!

About the talk: In this talk we will consider the famed Collatz Conjecture – one of the most easily stated unsolved problems in mathematics. We will discuss how mathematicians formulate research questions and collect computational data that can lead to other interesting conjectures and results. Bring a pencil and your curiosity – participation required!

About the speaker: After earning her S.B. in mathematics from M.I.T. in 1994, Prof. Tina Garrett spent two years playing amateur rugby and building a non-profit Minneapolis youth center from the ground up. Returning to graduate school at the University of Minnesota, she studied combinatorics and group theory, earning her PhD in 2001. Tina spent four years teaching at Carleton College before coming to St. Olaf. Her main mathematical interests are in enumerative combinatorics (partition theory, basic hypergeomet-

ric series and special functions), computational combinatorics, and in encouraging students to participate in undergraduate research. Tina is also an avid racquetball player and rarely misses a Vikings game on television.

OLE STEM event

The Piper Center will host their first Ole STEM event on Saturday, April 1st, 11am-2pm. This event will give current St. Olaf students a unique opportunity to network with alumni, parents, faculty, and friends of the college who majored and pursued careers in STEM fields — science, technology, engineering, and math. Come hear from a dozen alumni who have developed careers across a wide range of STEM-related fields in academic, government, and industry settings through three-minute lightning talks. These mini-talks will be followed by our keynote speaker, Peter Agre, who was awarded 2003's Nobel Peace Prize in Chemistry for his discovery of aquaporin water channels.

The event will be held in the Tomson Hall First Floor Atrium and Tomson Hall 280 (Alumni Auditorium); to RSVP, go to Handshake, search "Ole STEM", click 'Join Event,' and complete the form.

Pi(e) Day 5k

March 14th is fast approaching, and that means it's time for some Pi Day festivities brought to you by SAC and the Math Club! So if you are just itching to go for a run on the beautiful St. Olaf campus and enjoy a reward of a fresh piece of pie, sign up for the Pi(e) Day 5K! Sign-ups have ended, but you

can show up the day of and still participate (no pie guaranteed—sorry!). Check-in for the race will start at 3:30pm on March 14th in the Tomson Hall West Lantern (the one closest to Larson), and the race will start at 3:45pm. Feel free to direct any questions about the event to Andrew Petterson (petter1@stolaf.edu).

Would you like to edit the Mess?

The current MSCS Mess editor being a senior, we are looking for an MSCS-affiliated student to compile and distribute the Mess next year. This work-study job involves communicating with members of the MSCS faculty, student leaders, and—the biggest treat of all—Mess Czar Ellen Haberth in order to provide a resource keeping the St. Olaf community abreast of exciting MSCS happenings. The editor next year should be familiar with typesetting in \LaTeX and be excited about networking within the department. If interested, email the current Mess editor, Corey Brooke, at brooke@stolaf.edu.

Summer job opportunity

With Summer fast approaching, the District Office of Congressman Ellison is looking for intelligent, driven, and passionate individuals for its Summer 2017 Internship program.

Internships are offered to students or recent graduates who are interested in learning the operations of a Congressional office: current events as they relate to Congressional activity, federal legislation and policy issues, constituent services, and events research and planning. Interns are asked to work at least 15 hours per week, and are partnered with supervisors in their areas of interest. Unfortunately, due to House ethics guidelines, compensation will not be offered to interns.

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

People of color, persons with disabilities, LGBTQ individuals, and folks from diverse socioeconomic backgrounds are strongly encouraged to apply. Though many applicants are studying political science, we welcome people from all areas of study—the only requirement is a passion for social justice and community service. The priority deadline for Summer internships is April 15. Materials or questions may be emailed to Sadaf Rahmani at Sadaf.rahmani@mail.house.gov.

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 herstory to indicate the depth of women's contributions to mathematics, statistics, and computer science. This month, we explore the accomplishments of Dr. Maryam Mirzakhani, an Iranian mathematician who, in 2014, became the first woman to win the Fields Medal. As a teenager, Mirzakhani twice won gold medals in the International Mathematical Olympiad; as a student, she attended Sharif University of Technology and Harvard; currently, she is a full professor at Stanford. Her work, focused on Riemann surfaces and their moduli spaces, has, in addition to earning her a great deal of admiration and prestige, opened new byways in the diverse fields of algebraic geometry, topology, and probability theory. Especially astonishing, Mirzakhani is still quite young, so her career promises even more accomplishments to come.

Offering young mathematicians, particularly women, advice on how to be successful, Mirzakhani says "I think it's rarely about what you actually learn in class. . . it's mostly about things that you stay motivated to go and continue to do on your own."

Corey Brooke, Editor
Bruce Pell, Faculty Adviser
Ellen Haberth, Mess Czar