

MSCS Mess

Department of Mathematics, Statistics, and Computer Science
St. Olaf College, Northfield, MN 55057

December 11, 2015

<http://wp.stolaf.edu/mscs/mscs-mess/>

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Pi Mu Epsilon Fall Speaker

Title:	Approximating π Using Similar Triangles
Speaker:	Ryota Matsuura
Date:	Monday, December 14
Time:	3:30 pm- 4:30 pm
Location:	RNS 310

About the talk: A method for approximating π is using similar triangles. The method relies on a repeated/recursive application of a geometric construction that allows us to easily inscribe regular polygons inside a unit circle with arbitrarily large number of sides. As an added bonus, the talk will also involve how to derive some interesting identities, including an infinite product for π that was first discovered in the late 16th century.

MAA-NCS Problem-Solving Contest Results

Last month 29 Oles in 11 teams took part in the MAA's regional math problem-solving contest. A total of 82 teams from 29 colleges participated in the contest. Not only did St. Olaf field the most teams, but our teams did very well. Congratulations to all of our participants!

The top three teams from St. Olaf are:

- David Crisler, Matthew Johnson, Nathan Salo (5th place overall)
- Conrad Parker, Colin Scheibner, Andrew Yarger (8th place overall)
- Yuwei Jiang, Chenchen Xu, Skylar Zhang (11th place overall)

Our next team problem-solving contest will take place on Saturday, February 27. More information is available on the problem-solving group's website: <http://pages.stolaf.edu/diveris/category/ps/>

Come Compete in the Mathematical Contest in Modeling (MCM 2016)!

Warm-Up Meeting: Sunday, December 13 at 13:00 in RNS 204. Pizza will be provided! (It will be helpful to RSVP so that we know how much pizza to order.)

Bring all of your skills in mathematics, statistics, or computer science to tackle a real world problem from the contest. Past problems have included: solving a traffic flow problem in a small town, figuring out a way to eradicate ebola, and locating the missing plane from flight MH 370. In this contest you can work together in teams of up to three students competing with others from across the United States. The contest will take place on the St. Olaf campus during January 28--February 01, 2016. There will be a

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warm-up meeting on December 13, 2015 where we will look at winning solutions from past contests. The MCM 2016 is a fun way to gain experience with solving big real world problems and a nice achievement to add to your resume. As an added bonus, all teams will be kept well-fed during the contest, afterwards all participants will celebrate their successes with a special dinner off campus.

All levels of experience are welcome! Contact Prof. Purin (purin@stolaf.edu) for more information, or to register.

Game Night in the MSCS Lounge

Get ready for the first MSCS game night of the year! Mark your calendar for Monday, December 14th, from 6pm-9pm (or as late as you want to stay), on the 6th floor RMS for pre-finals de-stressor fun. The math honor society PME is running the event this year and we'll start to serve **pizzas and snacks** around 6:30pm. Drop by with your friends, classmates, and maybe even challenge a MSCS faculty to a game of Settlers of Catan, Dominion, cribbage, Scrabble, or whatever else catches your eye.

Writing Problems for a MS/HS Math Competition

Interstellar (<http://in-ter-stel-lar.com/>), an online academic competition for high school and middle school students, is seeking problem writers and editors for their nation-wide competition in late March. If you like to review interesting mathematics problems—or to come up with some on your own—this should be a fun experience for you. If you're interested, please contact Prof. Matsuura (matsuura@stolaf.edu) or Prof. Diveris (diveris@stolaf.edu).

MSCS T-Shirt Design Contest 2015-16

Do you want to own an MSCS memorabilia from this academic year?

Do you want the bragging rights to the design of said memorabilia?

Then look no further!

PME is looking for YOUR designs for this year's official MSCS t-shirt.

Submit a t-shirt design that incorporates an MSCS theme to pmehs@stolaf.edu or to khan@stolaf.edu by DECEMBER 31, and you might just be the one whose design is immortalized on the official MSCS t-shirt for this academic year!

Relaxation Station

Take a break and de-stress from your studies to enjoy popcorn, cookies and other treats. RMS 3rd floor Cliff Lounge, starting Dec. 16 reading day, through Dec 22.!

Apply to Become a Pi Mu Epsilon Member

Are you interested in joining the mathematics honor society? St. Olaf recently created a chapter of a national mathematics honor society called Pi Mu Epsilon (PME). PME promotes and recognizes scholarly activity in mathematics. If you are interested in PME, here are the requirements:

- Juniors: Need to have taken or currently be in one 300-level mathematics class.
- Seniors: Need to have taken or currently be in a second 300-level mathematics class.
- Need to take three-300 level mathematics classes before graduation.
- Need to maintain a 3.5 GPA in Mathematics.
- Need to participate in PME and/or volunteering experience.

If you have any questions, or if you would like to join Pi Mu Epsilon's St. Olaf Chapter, please contact the president Akina Khan (khan@stolaf.edu) by January 15, 2016.

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From the Editor



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