

MSCS



Mess

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

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This Week's Colloquium

Title:	My Favorite Intersection Graphs
Speaker:	Josh Laison
Time:	1:30 pm Tuesday, October 24 (treats at 1:15)
Place:	SC 182

Abstract: Intersection graphs are graphs that model spatial relationships between geometric figures such as polygons or polyhedra. So the study of intersection graphs brings together ideas from graph theory and discrete geometry (and algorithms too). The field is still relatively new, and there are still more interesting problems being posed than there are people working on them. In this talk Professor Josh Laison will survey his favorite problems about intersection graphs, many of which are still open. This talk will not assume any previous knowledge about anything.

About the presenter: Josh Laison recently joined the MSCS department at St. Olaf after a tour of small colleges in the U.S., including Colorado College and Kenyon College as a professor, Dartmouth College as a graduate student, and Oberlin College as an undergrad. He enjoys working on many different graph theory problems

with many different students, playing games, and obscure movie quotes. If you find him in his office he'll be happy to challenge you to a game of Blokus or Abalone.

Carlson Contest Happening Now!

Grab your team of three and head down to OMH 100 to pick up your Carlson contest now! The St. Olaf Annual Carlson Problem Solving Contest is your chance to get together and puzzle over some fun and intriguing problems with old and new friends. The contest can be picked up anytime 8:30-4:30 on Monday October 23 or Tuesday October 24 and returned at most three hours later. If your team consists of only first-year students or students who have only taken 100-level MSCS courses, you may take the first-year student contest. Prizes in multiple categories! Fame, glory and fun and snacks to all!

Spotlight on Katie Ziegler-Graham

Professor Ziegler got her B.A. at the College of Wooster in Mathematics. She went on to get her Masters in Applied Mathematics and Statistics at The Johns Hopkins Whiting School of Engineering. She finished with a Ph.D. in Biostatistics at The Johns Hopkins Bloomberg School of Public Health.

Prior to coming to St. Olaf, she taught Biostatistics in Helsinki, Finland. She currently teaches Statistics 212 and 272 at St. Olaf. She chose St. Olaf because it offered a unique combination of a liberal arts school with a well-developed statistics curriculum. She and her husband are expecting their first child in December.

When asked what mathematical symbol she would be... "I would be 'log' and would take on 'ln' in order to eliminate it from the statistics lexicon."

Math Grad School Night!

Interested in going to graduate school in mathematics? Come talk with current graduate students and faculty on Wednesday, November 1st in SC 182. Learn how to apply, pay for, survive and thrive in graduate school. Dinner begins at 6 pm and the program will start at 7 pm.

Math Practicum: First Call

Interested in mathematics in the corporate world? The Math Practicum (Math 390), offered during interim, should be on your mind. This course offers current challenges from Twin Cities businesses to small groups of students, each group tackling a distinct problem. At the end of the term solutions are presented to the sponsoring companies at their work sites.

Generally limited to juniors and seniors, admission to the course is granted after an interview process. Watch the Math Mess, your email, and poster boards for information on scheduling an interview. The interviews will occur before interim registration. For any questions, about the course, interviews, or other practicum matters, please contact Steve McKelvey (mckelvey@stolaf.edu, x3421) or Tina Garret (garrettk@stolaf.edu, x3419).

Pick-Up Lines for Mathematicians...

You fascinate me more than the Fundamental Theorem of Calculus.

Are you a differentiable function? Cause I'd like to be tangent to your curves.

You and I would add up better than a Riemann Sum.

My love for you is a monotonic increasing function of time.

I am equivalent to the Empty Set when you are not with me.

Jokes for Geeks

Q: What is the integral of "one over cabin" with respect to "cabin"?

A: Natural log cabin + c = houseboat.

Q: Why did the mathematician name his dog Cauchy?

A: Because he left a residue at every pole.

Problem of the Week (POW)

What's My Line? Given a set of points S in 3-space, define $L(S)$ to be the set of all points on all lines determined by any two points in S . Suppose $S = \{(1,0,0), (0,1,0), (0,0,1), (1,1,1)\}$. Then $L(S)$ consists of six lines. Find $L(L(S))$.

Submit all solutions before the appearance of the

next problem to Josh Laison in person, by e-mail (laison@stolaf.edu), or by telepathy. The first correct solution gets a prize; all correct solutions get fame and glory. Preference for the prize goes to problem-solvers who haven't won one yet.

Solution to the Problem of the Week

A Cutting Congruence: Cut each of the figures shown with one (not necessarily straight-line) cut so that the resulting two pieces are congruent.

Solution: Congratulations to Reid Price, who got all 12 figures and won a "Lurchin' Urchin" yo-yo ball, and to Karin Gilje and Joey Paulsen, who both got 9 out of 12. Cuts that work are shown on the back page.

If you would like to submit an article or math event to be published in the Math Mess, e-mail meyerm@stolaf.edu or dolank@stolaf.edu.

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