

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

This Week's Colloquium

Title: Research Experiences for Undergraduates (REU's) Speakers: Sarah Gilles, Senior in Math/Physics Bruce Hanson, Prof. of Mathematics Paul Humke, Prof. of Mathematics Amelia Taylor, Asst. Prof of Math Time: Tuesday, September 20, 1:30 pm (treats at 1:15)

Ever wondered what REU means, how you might get such an experience here at St. Olaf or at other schools, or why anyone would do this anyway? Come to this colloquium to find out. We will start by describing what REU's are and how to find them and then give some tips on how to go about choosing one. We'll also announce a new "Olaf Students Only" international REU that's being funded by the National Science Foundation. To cap things off Sarah Gilles who did an REU at Mt. Holyoke College this summer will talk about her experience and share some of the mathematics she worked on. Also, keep an eye out for two future colloquia given by other students on their experiences.

Here's a short description of Sarah's talk...

Selfatopes, a specific class of polytopes, first appeared in a theorem on toric varieties by Jessica Sidman and David Cox. This summer, my fellow researchers and I looked into the properties of selfatopes in order to create and classify them. After describing my experience at Mt. Holyoke this summer, I will define exactly what a selfatope is and then show the equivalence classes of new and

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Problem of the Week (POW)

exisiting selfatopes.

Here is the first problem of the semester. Please remember to submit **solutions**, an answer is not enough. Information about submissions follow the problem. I look forward to many solutions.

A girl carrying a brand new five-foot fishing pole is told she cannot ride the bus with an object that has a dimension of more than four feet. She goes back into the store where she bought the pole and explains her dilemma. The owner of the store gives her something that solves her problem. When the next bus comes, the girl gets a ride with her fishing pole in one piece, with no questions asked. What was the owner's solution?

*** Please submit all solutions by Wednesday at noon to Amelia Taylor by e-mail (<u>ataylor@stolaf.edu</u>) or by placing them in her box at OMH 201.

This is YOUR Mess!

Welcome to the first issue of the MSCS Mess for the 2005-2006 school year, and a special welcome to newcomers to St. Olaf and/or MSCS (that's Mathematics, Statistics, and Computer Science).

Issues of the Mess are distributed to your PO Box by Monday of each week. (If you are not on the distribution list, please e-mail Donna Brakke at brakke@stolaf.edu.) They are also posted in PDF format to http://www.stolaf.edu/depts/math/mathmess.htm. fabulous edition Each contains an announcement and abstract for the weekly MSCS Colloquium, the ever-popular POW (Problem of the Week), an answer to the previous week's POW (those who submitted correct solutions will receive proper fame and accolades), and information about contests, internships, job opportunities, new classes, conferences, MAA social activities, etc.

We hope to include additional features of broad interest to Mess fans this year. Potential features include faculty interviews, book and movie reviews, math in the news, etc. If you have ideas of things you would like to see in YOUR Mess, please email Associate Editor Meredith Johnson (johnsma@stolaf.eduT). We're looking forward to a fantastic year!

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