# MSCS Mess

Department of Mathematics, Statistics and Computer Science St. Olaf College Northfield, MN 55057 March 12, 2007 Volume 35, No.15

# This Week's Colloquium

Title: Student research in mathematics:

How? Why? When?

Speakers: Professor Jill Dietz and students

Joshua Campbell '08, Dan

Endean '09, and Billy Laxen '07

Time: 1:30 pm Tuesday,

March 13

(Treats at 1:15)

Place: SC 182

Abstract: Last fall a mathematics course called "Research Seminar" was offered for the first time. The 11 enrolled students were split into 4 teams that worked on different research projects in pure mathematics throughout the semester. The course was open to anyone who had taken either Abstract Algebra or ERA. The 11 students ranged from sophomores to seniors, and they worked on projects suggested to them by Prof. Dietz in group theory, ring theory, and graph theory. All four projects were excellent, and suitable for publication.

In this colloquium, Prof. Dietz will talk a bit about the Research Seminar course -- trying to recruit students for the Seminar in Fall 07 -- and the three students will introduce the audience to their projects.

## Pi Day

Do you like pie? How about pi? Well, come and get the best of both worlds this Thursday (the 15th) at the Pi Day After-Party! Ole graduate Luke Anderson will give his 8th annual Pi Day talk at 4:00pm in SC 278. In a lively one-hour presentation, Luke will regale us with the history and mystery of Pi, along with some quirky tributes to the infamous number. Join us first in the Science Center Lobby for a slice of pie, starting at 3:30! Hope to see you there!

### Jokes for Geeks

A mathematician is someone who thinks that if there are supposed to be three people in a room and five walk out, then two must enter the room in order for it to be empty.

President Bush's morning security briefing is wrapping up. Defense Secretary Donald Rumsfeld is concluding his part and says, "Finally, three Brazilian soldiers were killed yesterday near Baghdad." "OH MY GOD!" shrieks Bush, and he buries his head in his hands for a seemingly interminable 30 seconds. Stunned at the unexpected display of emotion, the President's staff

2 MSCS Mess

sits speechless, not sure how to react. Finally, Bush looks up and asks Rumsfeld, "How many is a brazillion?"

### Problem of the Week (POW)

**Painted Pennies.** Some number of pennies are placed flat on a table, some of them touching, none overlapping. The pennies are then painted different colors, so that no two touching pennies are the same color. Find an arrangement of pennies that requires at least four colors.

Submit all solutions before the appearance of the next problem to Josh Laison in person, by e-mail (laison@stolaf.edu), or by ham radio. 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 Checkering into a Corner. There were no solutions to this problem, but I can't resist spilling the beans since the solution is so pretty. Here is a winning strategy for Beatrice. She imagines the chessboard tiled with dominoes, each domino covering two adiacent squares. Abner's first move is on one of the two squares of a domino, and Beatrice plays on the other one. On every subsequent move, Abner must play into a new domino, and Beatrice plays in the second square the same domino. In this way she must always have a move every turn, and so must win the game.

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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