# **St. Olaf Mathematics Department**



Department of Mathematics St. Olaf College Northfield, MN 55057 December 6, 2001 Volume 30, No. 11

# **This Week's Mathematics Colloquium**

Title: Have the Best of Both Worlds: Math and Snow! Speaker: Sarah Kueffer Time: Thursday, Dec 6<sup>th</sup>, 2 p.m. Place: SC 186

# This Week's Colloquium

Are you interested in Graduate School? Come to this week's colloquium and follow Sarah Kueffer's path from St. Olaf to UMD. How did she decide to go to graduate school? Why UMD? Has she turned into a book? Does she get paid to go to school? What will she do in the future? Sarah will discuss all of these questions, but please bring more to ask! She'd love to share her experiences with you!

Sarah graduated from St. Olaf College in 1999 with a math major and teaching certificate. After St. Olaf she taught at Johnson High School for a year. Teaching in high school was an awesome experience, but after a year Sarah was ready to go back to school and hit the books! She decided to head to Duluth, where she is on her way to a Masters in Applied and Computational Mathematics at UMD and absolutely loves it! When Sarah's not studying or planning for class, she's outside enjoying all that Duluth has to offerskiing, canoeing, biking, swimming in "The Lake", hiking, oh and don't forget weaving!!

#### New Faces

A few weeks ago we brought you information on Julie Legler and now it is time to move the spotlight onto Dr. Doreen Dumonceaux Hamilton another new face in our illustrious department...

Doreen Dumonceaux Hamilton, a.k.a. Dr. D, is a native Minnesotan and even a St. Olaf alum (class of 1993)! She grew up in central MN as one of seven kids and got her math genes from her father who is a math professor at St. John's University.

While at St. Olaf, Dr. D went on the Budapest Semester (fall of 1992) and had a great time. After graduation, Dr. D headed out to Montana State University in Bowsman, MT where she earned her masters in Mathematics and doctorate in Topological Dynamic Systems, thus earning herself the title of Dr. D.

In Montana, Dr. D met and married her husband Steve, a computer consultant. After completing her studies at MSU, she came back to the Hill. She and her husband now live in Nerstrand with their son Benjamin and have another child on the way. (If you would like directions to Nerstrand, please ask Donna)

Believe it or not, Dr. D does have interests outside math, playing with her son and preparing for the new baby. She and her husband enjoy hiking and camping—they took full advantage of the trails while in Montana, and she also enjoys playing computer games.

Here at St. Olaf, Dr. D is teaching two sections of Calculus I and one section of Calculus II this semester. Next semester she will be teaching the Gateways to Mathematics course (The Language of Mathematics—it sounds really neat!), Intro to Differential Equations and Calculus II. She will not be teaching during Interim as she will be having her baby <sup>(C)</sup> She and Steve are looking for names, so if you have any suggestions, please send her an e-mail at <u>hamiltod@stolaf.edu</u>. You can also deliver your suggestions in person and get to know Dr. D a little more by stopping by her office in OMH 101.

Welcome (back) to the Hill Dr. D!

#### Puzzle Website

Here's another neat website to check out for fun online games. Just a warning, it seems to be as addictive as games like Snood, so beware... http://www.joker-games.com/JustSkid.html

# Donald Duck!

The St. Olaf MAA will be showing "Donald Duck in Mathemagicland" on December 12 at 2:00 p.m. The location is yet to be determined, so keep your eyes peeled for more information about this mathematics movie classic.

# Last Week's Solution

**Last week's problem:** A variation of the **Buffon Needle Problem** A square of diagonal 2 in. is dropped onto a floor made up of 2 in. wide boards. Assuming all orientations of the square are equally likely, what is the probability that the square lands on a crack? (Equivalently, that it crosses one of the lines x=0, x=2, x=4, ...)

**Solution**: We did not receive any solutions to this problem, so now you get two problems to try for this week.

# Problem of the Week

If n is a positive integer which can be expressed as  $a^2 + b^2 + c^2$  where a, b, and c are positve integers, prove that  $n^{2k}$  can be written in the same form.

\*\*\* Please submit all solutions to Cliff Corzatt (corzatt@stolaf.edu) by noon on Friday.

If you would like to receive a copy of the Math Mess in your P.O. Box weekly, please e-mail Donna Brakke at <u>brakke@stolaf.edu.</u>

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