
VITAL SINES

Volume 9, Issue 1

September, 2007

A newsletter of the Plattsburgh State University Mathematics Department

Welcome back!

A special welcome to all new mathematics students, freshmen, transfers, and converts!

Faculty News

Dr. Tony D'Aristotile has retired from the mathematics department. We have no doubt he will continue working on his research, and teaching at Stanford university in the summers. We wish him a happy retirement!

Dr. Sam Northshield is on sabbatical for the academic year. He will spend part of his time visiting the Mathematics department at the University of Vermont.

Dr. Greg Quenell is serving as Distinguished faculty fellow in the Learning Center for this Fall semester. The learning center faculty fellows serve as a resource for our math and stats tutors in the learning center.

Kudo's to our Award winners, Spring '07

In May each year, at the annual Arts and Science award ceremony, several of our mathematics majors win awards. Here are the awardees from last spring:

The Hudson Award: A scholarship open to all science majors, for outstanding achievement: **Jason Gumaer**

Semmler Math Endowment: This scholarship is awarded to an undergraduate student majoring in mathematics on the basis of academic excellence: **James Firlik, Fathima Muzamil, Sarah Taylor**

Kathleen T. Schaeffer Awards: Given to outstanding students majoring in Mathematics Education who will be student teaching in the upcoming year: **William Clairmont, John Clemons, Geoffrey Cortalano, Jason Gumaer, Zachary Warner**

Math Scholars award: Given to graduating seniors, who in the opinion of the department have accomplished outstanding achievement in the Mathematics major:

Jennifer Garbera, Kelly Garrand, Tabitha Rosenbrock, Angela Rotella, Ilona Sitnitsky, Zachary Warner, Marie Wass, Solomon Winternitz

Mathematics Distinguished Academic Service Award: Given to students with an excellent grade point average, who have promoted mathematics in the department, and are outstanding examples of successful learners:

William Clairmont, Marie Wass

Reminder: Course advisement runs from Monday, October 15 through Friday October 26. Be sure to make an appointment to see your advisor during this period.

RUSIS in TEXAS...

During the summer, senior Mathematics Major, Rashid Thompson participated in the ten-week Rice University Summer Institute of Statistics. Here is his account:

My experience in the RUSIS program at Rice University was rewarding. First, I expected this program to be challenging and require a lot of hard work. The program lasted ten weeks. The first four weeks were designed to be helpful for the latter part of the program. We had a short course on Probability and Statistics. This class was different from what I had experienced in Probability and Stats here at PSU. It dealt with a lot of theory and we had this class for 3 hours every day. Along with the class, we had another class in the computer lab. We were exposed to different computer programming languages such as, Mathematica, Matlab, R, and LaTeX. We used LaTeX to write our reports for our projects.

Even though we did a lot of work, we had time to do activities as a group. We visited NASA and toured the space center. Also, we went to a baseball game.

I found that it was helpful being in groups for the class and the project because everybody contributes to the goal at hand. Also, people like to help others when they need help.

Every Friday we had group meetings with our program director and our advisors. In those meetings, we talked about current issues about the program and about graduate school, sometimes had guest speakers, or watched movies. I found out a lot of information about graduate school. I found out how to apply, the requirements, how long it will take, and how to pay for it.

Overall I am glad I had the opportunity to do this type of work and to meet new people. I would advise students to do an REU program because it will help you to determine if graduate school is for you and it will look good on your resume. Now, I have thoughts of applying to graduate school. Also, I learned new things that I can take with me for the rest of life.

Discrete Math Days in the Northeast

Prof. Northshield attended one at the Breadloaf Campus of Middlebury College on Sept. 15. He writes: "There were four speakers, the most illustrious of which was John H. Conway of Princeton. Over lunch, Prof. Conway described several of his unusual talents. He described, or tried to describe, how he memorized Pi to 1000 digits and how he can multiply two large numbers in his head. His favorite recreation of this sort though is factoring numbers. He assured me that practice is indispensable; he reported that during sleepless nights, he would add 10,000 to the number on his digital clock and factor (in his head) the resulting integer before the clock changed."

There will be another Discrete Math Day of the Northeast this semester; it will be at Dartmouth College on Oct. 27-- see <http://www.math.dartmouth.edu/~dmd> for details.

What are our alumni up to?

Landing dream jobs...

Jenn Garbera (07) writes: I got a job at Peru Middle School as the new 8th grade AIS teacher! I got hired 2 weeks after I graduated! There were 12 other candidates that I was up against. It really is my dream job. I was first introduced to AIS (Academic Intervention Services) during my student teaching at Beekmantown. I wish I had learned more about it in my education classes, but I am learning as I go. My salary is the same as the regular classroom teachers but my responsibilities and duties are different. Each day I am "pushed-into" 3 regular math classes and one science class, where my job is to provide extra in-class help to students who didn't pass the previous year's state math exam. This is great because I get to watch the various teachers' different styles of teaching. I also have 3 "pull-out" classes that are comprised of 5 to 7 lower-level students where I teach lessons that supplement their normal math class. It is so much fun! I look forward to going to work every day! I'm not sure if you heard, but John Clemmings, another PSU alumni, also got a job at Peru as a full-time building sub. It was good to see a familiar face!

Pondering Math, Pi, Babies...

Leon Lashway, abd on his math major, wrote to Prof. Bodenrader –

Every now and again I think back on my time spent at SUNY Plattsburgh and I always end up thinking about you and my love for Mathematics. I still try spreading the love of Mathematics, and soon I will be able to begin teaching some Math to my own children. Don't be frightened but my wife and I are going to have a child and not only one child but twins no less. Yes I still believe anything worth doing is worth doing right so I thought why not have two from the start and go from there. Identical twin girls, I can't wait till they are two or three so I can teach them the value of Pi to the 2034893284023843 place...or at least 3.14159.

Dreaming of Gabriel's Horn not too far from the horn of Africa ...

Jeff Mortellette sends greetings from Mali! He writes:

My brother came for a visit after school let out, which was nice. We even worked a few calculus problems (I had just read an article about Gabriel's horn and remembered you showing us why it had an infinite surface area but finite volume). Anyway, it was nice to brush up on my calculus skills. My wife and son and I are doing well. We decided to stay another year in Mali. I think it would have been difficult to look for work, move and start a new job with a baby. But this will be our last year here and we've got a few places we'd like to move to next: Madagascar, Laos, Ghana and Tanzania. I also got accepted to graduate school at UVM, so if we can't get a job in any of the countries listed above, we'll be neighbors. The recruitment of teachers in Africa seems to start early. My wife and I are going to Ghana in October and we'll meet with a school there.

When it's 110 degrees out, I sure miss Plattsburgh!

Math club needs a chair (or two, or three...)

Anyone whose arm could be twisted to become the math club chair should see math club faculty advisor, Prof. Bodenrader really soon.

Seize the day...

HRUMC XV and the new Mid-Hudson Mathematics Conference for Undergraduates

The 2008 Hudson River Undergraduate Mathematics Conference will be close to home this year: HRUMC XV is scheduled for Saturday, April 19, 2008, at St. Lawrence University, in Canton, New York. The plenary speaker is Jeff Weeks, best known as the author of *The Shape of Space*. As always, mathematics students are invited to present short talks at the conference, or just to spend the day listening to a wide variety of talks given by their peers from across New York and New England.

If you just can't wait until April, you may want to attend the first Mid-Hudson Mathematics Conference for Undergraduates on Saturday, October 20, at Bard College. Bard is in Annandale-on-Hudson, between Albany and Poughkeepsie. The Mid-Hudson Conference will feature a selection of 20-minute student talks, mostly reporting on summer mathematics programs or projects from last spring. Rob Benedetto of Amherst College will give the plenary talk. His title is "The abc conjecture: an Introduction".

For more information, contact Prof. Quenell.

The director's summer program at NSA; Cryptologic mathematics for Exceptional undergraduates.

The deadline for application is October 15. For more information, talk to Prof. Bodenrader

Problems, problems, problems

Prof. rGreg Quenell is our problems editor for this year. Here are the first challenges for you!

Give your solutions to Nicki in the Math Department office. Include your name and the date and time when you submit the solution. For each problem, the first solution that is judged correct and complete (presentation counts, and no computer use allowed) will win a prize for the solver.

1. (From Prof. Bodenrader) Find the indefinite integral of $\int \sqrt{\tan x} dx$. (Prof. Bodenrader suggests beginning with the substitution $u = \sqrt{\tan x}$, and warns that the problem can get rather complex.)

2. (From Prof. Quenell) If two points are selected at random along a straight stick, and the stick is broken at those two points, find the probability that the resulting three pieces can be used to form a triangle.

Closing Credits

Editor: Margaret Morrow

Assistant Editor: Need a volunteer ☺

Contributions for the next issue would be much appreciated

Good fortune will elevate even petty minds, and give them the appearance of a certain greatness and stateliness, as from their high place they look down upon the world; but the truly noble and resolved spirit raises itself, and becomes more conspicuous in times of disaster and ill fortune. - Plutarch

Math News

from the New York Times, Apr. 15, 2003

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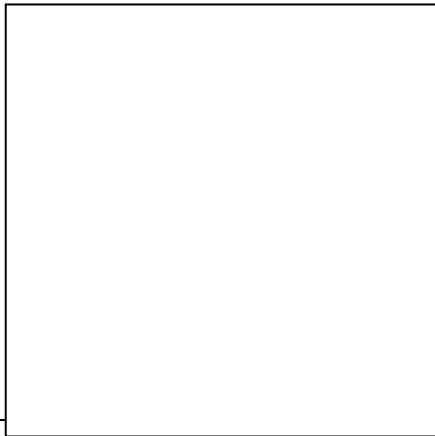
The Chair Speaks

A note from our chair, Dave Kenoyer

Nothing is more fruitful – all mathematicians know it—than those obscure analogies, those disturbing reflections of one theory on another; those furtive caresses, those inexplicable discords; nothing also gives more pleasure to the researcher. ~~ André Weil

Queer little twists and quirks go into the making of an individual. To suppress them all and follow clock and calendar and creed until the individual is lost in the neutral gray of the host is to be less than true to our inheritance.... Life, that gorgeous quality of life, is not accomplished by following another man's rules. It is true we have the same hungers and same thirsts, but they are for different things and in different ways and in different seasons.... Lay down your own day, follow it to its noon, your own noon, or you will sit in an outer hall listening to the chimes but never reaching high enough to strike your own.
Angelo Patri

A Math Joke



INTERESTING WEB SITES

Fractalina

Weeks

Department website

Advice from old-timers:

(REPRINT FROM V 8 ISSUE 1)

Last year we solicited from math majors some responses to the question "What advice would you give to a new math major?"

Here is some of their good advice:

If you are having trouble, form a group!

Get to know other math majors, and don't be afraid to get help from the professors.

Listen to Rock'n'Roll while completing homework, it Helps!!!

Procrastination is the kiss of death.

Become good friends with the people in your math classes because in the upper level classes you will spend the majority of your time working on those classes with these people.

Get to know people in your classes because working with others makes your life easier and makes classes more enjoyable.

Don't wait until your work piles up and it's too late before understanding the material covered in class. The professors in the Math department are extremely resourceful and more than willing to help.