Department of Mathematics

Dear Alumni and Alumnae,   **May 2012**

Greetings from the Mathematics Department! We hope this letter finds you well. As you read the second edition of our newsletter, please take a moment and think if there is anything you want to have included in the next edition. Did you get a new job? Enter grad school? Get a promotion? Get married or had children? Retired? Did something cool or impressive that others might want to know about? Would you like to be featured in the next letter? Also, please help us maintain, expand, and update our address and email list. Send all communications to: kvorwerk@westfield.ma.edu

As always, best wishes for you and yours,

Marena Batzanian

Susan Baker

Elizabeth "Libby" Boland

Alicia Boucher

Steven Brinker

Jason Camp

Sara Covalli

Brian Davis

Ryan Hackett

Adam Kosakowski

Nicole Micucci

Stephen Tetreault

Graduating Class

This year, we graduated 24 Mathematics majors during the May 19th commencement, and three graduate students. Due to construction on campus, the ceremony was held at the Mass Mutual center in Springfield. On the one hand, we missed the campus setting and connection, on the other hand, families could see and hear better and there was air conditioning. Our congratulations to our graduates:

Kelsey Erwin	Corinne Glennie	April Gordon
Kim Hallett	John Hayden	Katrina Higgins
David Lantagne	Amanda Marsh	Brian Mernoff
Heather Parker	Eric Pollander	Jennifer Rodger
Dmitriy Vasilchenko	Stephen Walsh	Christian White

Phil Hotchkiss and his fiancée Annie Fedak are getting married this June!! Please join us in wishing the happy couple all the best for their future together. I am sure Phil would love to hear from you photchkiss@westfield.ma.edu.
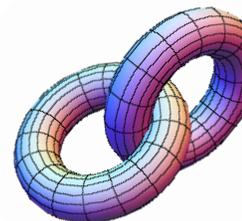
Problem Solving Contest The first ever annual departmental problem solving contest was held this March. Majors could enter individually or in teams of up to three students. Freshmen to seniors participated and competed for $300 in cash prizes.

On July 1st, **John Judge** steps down as Chair of the Mathematics Department after serving for 10 years - the maximum possible. Karin Vorwerk will be the incoming Chair.

Volker Ecke is on sabbatical this semester. He sends this report:

Greetings to all of our alumni from the University of California at Santa Barbara (UCSB), where it is sunny this week, with temperatures in the mid 70's!!

I am spending my spring 2012 sabbatical semester at the Center for Mathematical Inquiry at UCSB, working closely with Bill Jacob and other colleagues in the area of teacher preparation. I met Bill a few years ago at the R.L. Moore conference in Austin, TX. This quarter, we're co-teaching a graduate course on Adolescent Development in Mathematics, which aims at providing secondary teachers with a deeper understanding of the mathematical development through the elementary grades and into middle school. It's a great opportunity for me to learn more about the research literature and to explore how analyzing classroom videos can help teachers learn about student thinking in mathematics. This time is an amazing gift, which allows me to visit many classes, dive deeply into text books, articles, professional development materials, to explore classroom strategies, and to work closely with colleagues whose broad philosophy of learning and teaching is familiar, but who have many ideas and classroom strategies that are new to me. It is a valuable time to reflect on my own approach to teaching and learning, and to be inspired by new ideas. How amazing would it be for all of us to have such an inspiring opportunity!

Of course, Santa Barbara is also a delightful place to spend this time! It's mostly sunny with temperatures in the mid 70's during the day, year-round. The beach is walking distance from the condo we are renting, and the university is a beautiful 20 minute bike ride away. The ocean is too cool to swim, but surfers in their wet suits ride the waves at many beaches. A high ridge of mountains rises behind Santa Barbara, where hiking provides spectacular views of the city, the ocean, and the Channel Islands at the horizon.
Winter rains make the desert bloom with wild flowers. Watching the ebb and flow of the tides as the moon moves through its phases makes me wonder how so many things close and far are so deeply connected.
Missing you all! Wish you were here!!

This year's **Hudson River Undergraduate Mathematic Conference** – HRUMC – was held at Western New England University in Springfield. As is tradition by now, a large number of Westfield students and faculty attended and gave presentations; in fact, only the host institution had (one) more talk. Below is

a list of the titles of Westfield State talks:

- Flood Frequency
- An Introduction to Gauss and Number Theory
- Creating String Art
- Determining the Correlation of High School and College Performance
- A Modern Look at Conformal Mapping
- Is that a Fractal in your pocket?
- Deciphering Predictors of Violent Crime
- Mathematics in the Game of Love
- Identification Numbers Investigated
- Square Triangular Numbers
- Euclidean Construction
- Cryptology: Past, Present & Future
- Mathematical Models in the Treatment of Tumors
- Let's Wallpaper With Geometry
- Children's Literature and Mathematics
- Now Who's Done It: Sherlock Holmes in the Mathematics Classroom
- The Life of Euler and the Sums of Series of Reciprocals
- Progressions of Primes and Primes in Progressions
- Combat Models: The Dark Side of Math

The decorations were made with Mathematica® using the parametric functions

x= sin(u)sin(v)+acos(20v), y=cos(u)sin(v)+acos(20u), z=cos(v)	x=4+(3+cos(v))sin(u) y=4+(3+cos(v))cos(u) z=4+sin(v)	x=8+(3+cos(v))cos(u) y=3+sin(v)) z=4+(3+cos(v))sin(u