AFTERMATH

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Texas A&M University-Commerce - Mathematics Department Newsletter

Fall 2008

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Whoever despises the high wisdom of mathematics nourishes himself on delusion and will never still the sophistic sciences whose only product is an eternal uproar. —Leonardo da Vinci

Faculty Comings and Goings

Bill Aslan is on leave for the fall 2008 semester—practice retirement?—but it is just an experiment, and he will be back full-time in the spring. We welcome Josh Patterson as a new graduate assistant, and welcome back Cody Fisher, Bimal Ghimire, Jason Moore, Patrick Rose and Mark Stellpflug as mathematics graduate assistants. All teach either Intermediate Algebra, College Algebra, and/or assist with the Math Skills Center and supplemental instruction. Adjuncts this fall are John Fornof and Jeff Norris in Commerce; Shari Beck and Brenda Reed in Corsicana; and Leah Reagan in cyberCommerce (continuing our online College Algebra class, albeit with face-to-face testing).

Departmental Grants/Outreach

Hasan Coskun is working with a colleague at UT-Arlington on a \$108,000 Advanced Research Program grant from the Texas Higher Education Coordinating Board (THECB) ("Inverse Scattering and Spectral Problems in Human Speech", which in part uses wavelets). Eileen Faulkenberry continues working with Teacher Quality (TQ) grants from the THECB; this year, In-Depth Middle School Mathematics (\$87,000) has 18 participants from local school districts. Topics this year include rational numbers, their operations, early algebraic reasoning, and measurement. Vanessa Huse was awarded two THECB grants: an \$87,000 TQ grant serving mathematics teachers in Navarro County, using various technological tools; and a \$150,000 Carl Perkins State Leadership Grant (for podcast training targeting 10 vocational and technical community college faculty at 10 community colleges—to enhance online instruction, using a trainer-of-trainers model).

The department is active in other math/science grants. *Operation* Spark!, now in the final year of a 3-year, \$150K grant from L3-Communications, involves schools in Commerce and Greenville. (The math component has college students visit area schools in a cryptography "strand" — with prizes to kids — and other applications like the Mathematics of Voting: how to get almost anyone elected.) The grant includes a Saturday enrichment activity/workshop for kids. We also support a generous 3-year, \$1.5M grant for math and science outreach, Project STEEM. Most funds are for projectbased learning, with a large chunk going towards the Infinity Institute (an intensive, four-week, summer math and science camp, targeting rural and economically disadvantaged, but high-aptitude, area high school kids). We also help with enrichment workshops in Mesquite, one Saturday a semester—not just in math! (Other areas have included art, business, robotics, computer security, and biology, among others—like mathemagical tricks that amaze.) The department also began MathSciFest with the other sciences, a Friday of hands-on activities for math and science teachers and community college faculty (and the students they bring)...capped by a zany quiz bowl, with prizes. Attendance is limited to about 100 students and 20 teachers. MathSciFest2008 will be Friday November 14. If you are a teacher, or live in the area and have a middle or high school student who might benefit from these activities, or just want to know more, let us know!

Math Skills Center/Developmental Math Update

The Intermediate Algebra course continues to have a Supplemental Instruction (SI)-style workshop attached. The workshops have received favorable responses from the students, with large percentages of the students stating that the workshops have helped them understand the concepts. SI Leaders continue to be active members of the math department community. The Math Skills Center continues to serve students in math courses through Calculus I. Approximately 15 tutors work with students in this area. Tutors must know how to work with MyMathLab (the online homework program used for Intermediate and College Algebra). The Math Skills Center also houses the Ellison Letter Press, used in the Math Elementary Education courses; many die cuts are available for both student and alumni use.

Mathematics clubs and other student activities

The math clubs took students to Tarleton State University

this past spring for the Texas Section MAA conference. Five students attended and two gave presentations in the Student Sessions. We had a team in the Calculus Bowl once again and, although they did not receive any awards this year, we are still proud of them for participating



and putting up a good fight! The clubs also co-sponsored the newly resurrected All Sciences Picnic in September. The clubs routinely have guest speakers, usually students or faculty. **Brandon Combs**, an alumnus who is an actuary, spoke last March—any other alumni volunteers out there??! **Pamela Webster** continues as the faculty sponsor of the clubs. Next up, **Hasan Coskun** speaks on "The Sound of Mathematics" (November 6).

We also continue to find students who willingly torture themselves each December on the Putnam Exam. (It's a 6 hour exam, with 12 problems, and the most common score nationally is ZERO.) Here's a fun example from Putnam2007: Let k be a positive integer, and write $1,2,3,\ldots,3k+1$ in random order. What is the probability that, at no time in the process, the sum of integers that have been written down is a multiple of 3?

More Faculty and Staff-Related Updates

Stuart Anderson continues teaching classes in Commerce, Mesquite and Corsicana. He also continues as Governor of the Texas Section of the Mathematical Association of America. Governor Anderson is pleased to report that the MAA is in good shape. Bill Aslan will be in his 42nd year of teaching in Commerce this spring (having started in the summer of 1967). Hasan Coskun is supervising a graduate thesis student who is analyzing bird vocalization ["A Mathematical Modeling and Analysis of the Acoustic Structure of Canary (Serinus Canarius) Vocalization"]. Hasan continues as a reviewer for the AMS's Mathematical Reviews and Applied Mathematics Letters. He was able to fund a grad student on an internal research grant, and is working on a proposal to increase undergraduate research opportunities. When not doing topology,



Charles Dorsett sits in on jam sessions conducted by various local artists (including Stuart, see photo at left). Eileen Faulkenberry and Lymeda Singleton co-sponsor "Math Mania" once a month, professional development for prospective elementary and middle school teachers (including

"Measurement Olympics" and "Pi Day"). Lymeda also started a departmental "Problem of the Week" contest on campus. She was a speaker at the NCTM regional conference in Houston last November ("Transforming Motion Geometry") and was a presenter of 4

sessions at the Conference for the Advancement of Mathematics Teaching (CAMT) in Dallas in July ("Basing Multiplication and Division on Base-10 Blocks" and "Folding Fraction Multiplication and Drawing Division"). **Tom Faulkenberry** continues steadily working on finishing the PhD in



Cognitive Psychology at A&M-Commerce, and teaching a mixture of classes, from college algebra to classes serving the elementary education majors. **Laurene Fausett** and Don (and dogs Charlie Brown and Dory) once again enjoyed the summer renovating an old cabin in Centennial, Wyoming. Laurene also was faculty sponsor of our first-ever team in the annual Mathematical Modeling competition (which received an Honorable Mention), and was faculty advisor for two student talks at the April Texas MAA meeting (where she also presented her own talk, Numerical Methods for Matrix ODE, and has submitted a related journal article for pub-



lication). **John Heath** has been unable to convince enough of his colleagues to resurrect a Mathletes softball team. Besides taking classes at night. **Angie Hill** has been busy with song-writing for her husband's band, *Texas Breeze* ("Life with My Girls" and "Ride That Texas Breeze"). This

summer they spent vacation time building a porch for their Wolfe City home (not a small one: 12'x45' on the side of their house, and a smaller one in front). Angie continues to hire and supervise the office staff student workers. Yelin Ou and his family enjoyed a homecoming visit to China in the summer. His son Maiqi is now applying for colleges, and he and his wife have started to wonder how they are going to miss him. With two internal grants from the university he and his collaborators have completed 5 papers on p-harmonic and biharmonic maps (one accepted, four submitted). He also supplied 12 submissions to Mathematical Reviews and Zentralbratt Math (European Math Union). He is trying to involve more undergrad and grad students in research projects, and also trying to extend international cooperation (including possible visiting scholars and students coming to work and study in Commerce). Nikolay Sirakov and Dora are happy that their daughter, Nona, started in the Honors Program (in math and computer science) at UT Austin. He is working with grad students on knowledge extraction, and one of them completed some Java coding. He published an Image Database Indexing paper in an IEEE proceedings; a paper was accepted for publication for another IEEE conference (dealing with recognizing human emotions). He is a member of the program committees of two conferences, and a reviewer for several journals and conferences in the field of Image Processing. Ka Sai Un has now had a year's experience teaching several sections of Intermediate Algebra and a section of College Algebra each semester. She is trying to develop ties between A&M-Commerce

and mathematics colleagues at universities in southeast Asia. Ka Sai gave a talk at the April Texas MAA meeting ("Surviving first year full-time teaching in Developmental Mathematics"). Pamela Webster is working on articles concerning studies of our developmental math program. She is working this year on a TQ grant at Paris Junior College that is being directed by alumna Heather Burkham. Both are excited to have their first grant together and the process seems to be going well. It's definitely a learning experience for everyone involved. In her spare time, Pamela continues to ride horses and SCUBA dive. Rick Kreminski's blue Honda (with over 300K miles) happily reports that it survived the Dedman School of Law (Rick graduated in May, just before gas prices really spiked). Rick can vaguely visualize the bar exam, sometime in the misty future. "Pi to thousands of digits from Vieta's formula" (Mathematics Magazine) and "Visualizing the chain rule (for functions over **R** and **C**) and more" (IJMEST) came out in 2008. He finished a year as president of the Texas Association of Academic Administrators in the Mathematical Sciences.

Mathematics department approved by TEA for Master Mathematics Teacher certificate—more courses offered in Mesquite for spring 2009

At a meeting in Austin in May, the department's Master Mathematics Teacher certificate for secondary teachers was approved. The program includes four mathematics graduate classes offered in Mesquite, at the university's facility on Motley Drive; details are on our website. Note that we're offering 3 grad classes in Mesquite this spring, including one 'sequence' offering (part of the 'core' requirement for the traditional master's).

Alumni Updates

Some of this info from alumni might be about a year old: **Steve** Snyder is working for the US Census bureau. Chuck Carona has been Dean of the College of Education at Dallas Baptist University since 2003 (and is the former principal of J.J. Pearce HS in Richardson). Jonna Wallace (Spiller) left Bonham HS (after having been there 15 years) and moved on to teaching mathematics for the state of Texas to adults—no TAKS. Mike Coutts teaches for Missouri State in Dalian, China (which is on the mainland near North Korea). Doug Richey served the department as Alumni Ambassador this year, and continues his work at Northeast Texas Community College. Michael Pentecost told us a while back about joining Ryan High School in Denton, and his website there explains "After earning my master's degree in mathematics, I decided to pursue other careers. However, in none of them did I feel that sense of personal satisfaction that I had as a teacher." Joey Cato let us know that he's in the Silicon Valley area, working in the computer gaming field. Mary Lyons wrote last fall that she had celebrated her 25th anniversary of employment at Kemp ISD (from bus driver, to math teacher, to, for the past 6 years, Principal of the high school). Katsuhiro Iwao is in his first year in the PhD program at UT-Arlington, studying statistics. Caleb Grisham is in his first year of full-time teaching at National Park Community College, his alma mater, in Hot Springs, Arkansas. Sarah Bunch is teaching full time at Greenville HS. Holly Stovall is in her second year statistics at SMU (pursuing a PhD in statistics). Please keep in touch!

Previously Retired Faculty

Vance Underhill and Ann Key (then Ann Waldby) were next-door neighbors as kids in Old Ocean, Texas in the late 1940's, went to the same high school and even the same university. After graduation their paths diverged. In Spring 2008, both spouses having died, they were reunited due to the efforts of Ann's sister Julia. They were married on August 29 in a small ceremony near Ann's house in Ashton, Maryland. They recently returned from a two-week

honeymoon in California. They welcome any visitors who want to hear more about their interesting story. **Jack Lamb** reports that he and Mildred have four grandkids and a great grandkid (whom we are all sure are all great). He was honored at the awards banquet of the Texas Section of the MAA in Stephenville with a plaque commemorating 40 consecutive years of attendance at the annual Texas Section meetings, retiring as Texas Section photographer at the same meeting. Jack's pictures from the Stephenville meeting from the local Lions Club, having served as secretary for five years from 2002 to 2007. He and Mildred are active in the First United Methodist Church of Belton; Jack maintains the church's website, and the website for ACT (Aware Central Texas) which is an organization combating child abuse and neglect in central Texas. **John Davenport** is a proud grandfather; two grandsons live less than 15 minutes away, while his granddaughter lives near Atlanta, Georgia. The past year has included trips to California, Niagara Falls, Canada, Mississippi, and Georgia (and many trips to Texas Ranger baseball games)... and the weekly trip to Commerce for Kiwanis Club meetings and visiting friends. "I've finally tested (successfully) my 'bionic' knee at the local bowling alley, and I hope to put my new 'senior' fishing license to good use." Finally, Dale Bedgood provides some recollections of Dr. John Zimmerman, a former Dean and faculty member, who died September 8, 2008 in a hospital in Plano following an illness of several weeks: Dr. Zimmerman came to East Texas State University in 1975 as Dean, College of Sciences and Technology and Professor of Physics and Mathematics. He was especially fond of math because of its major role in so many areas of science and technology. John was an outstanding administrator and worked tirelessly to advance the standings of all nine departments in his college. John was known among his colleagues as an independent thinker and one who was able to make decisions without relying on the consensus of others. Following the merger of The College of Sciences and Technology with two other colleges in 1984, John came to the Math Department to complete his career. He took great pride in his teaching and

working with students, and they responded to him and his style of teaching with much enthusiasm. He retired about 1987, and lived out his life in Commerce. He was a Kansas native.

Dates to remember:

The annual joint AMS/MAA meetings are January 5-8, 2009 in Washington, DC. The Texas Section MAA meeting will be at the University of North Texas in Denton, April 16-18, 2009 (www.maa. org). [And for those involved or interested in the early grades, there are upcoming NCTM E-Workshop Series sessions November 4, and December 2 and 3—mostly for preK-2 and 3-5 mathematics—contact Lymeda Singleton or Eileen Faulkenberry.]

Foundation and Scholarship News

We are most thankful for friends of the department who over the years have helped countless students with their mathematical careers. Working with two other departments on campus, we are now able to assist some of our students who are currently teachers; this is in addition to our ability to help needy undergraduates. Recipients of scholarships since our last newsletter are:

- •Flavius Kortik (Cecil Wright Scholarship)
- •John Nguyen (Dale and Betty Bedgood Scholarship)
- •Mark Ellerman (Rachel Lafferty Scholar)
- •Lauren Crowe (James, Gloria and Bill Aslan Scholarship)
- •Flavius Kortik (John and Elaine Yznaga Scholarship)
- •Tina Morison (Bill, Gloria and James Aslan Scholarship)
- •Jan Bedford (Rachel Lafferty Excellence)
- Jackie Johnston (Rachel Laffery Excellence)
- •Ashley Morgan (Rachel Lafferty Excellence)

The W.W. "Bub" Taylor Scholarship, the Dennis Grantham Graduate Mathematics Scholarship, and others, will be listed in the next newsletter. If you wish to make contributions to any of these funds, you may call the Department at 903.886.5157 or the A&M-Commerce Foundation at 903.886.5712

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We would like to hear from all of our former students. Whether you used slide rules or calculators in the classroom, attended ET or A&M-Commerce, we are interested in what has happened in your life since you left campus. If you have a story about a favorite professor, we would like to hear that too. Please fill out the form below and return it to the Math Department so your information can be included in the next *Aftermath Newsletter*.

Name:	
Address (for our files):	
City State & Zin	
City, State & Zip: Degree:	Year Graduated:
Email address:	
Please list any career changes, achievements, awards, or personal news that you wo	

Send to the: **Mathematics Department**

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or via email to *Richard_Kreminski@tamu-commerce.edu*

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Homecoming Brunch
The nineteenth annual Mathematics Homecoming Student/Alumni Brunch (formerly Breakfast) will be held at 10:30 a.m., Saturday, November 1, 2008 in the Bluebonnet room of the Sam Rayburn Memorial Student Center. Please send in your reservations by October 29, 2008 . The cost is FREE(!) to alumni, special friends of the math department, and their guests – but only if we know ahead of time (for catering purposes).
Name:
Address (for our files):
City, State & Zip: Email address:
Please reserve places at the Homecoming Brunch on November 1.
Please return to:
Mathematics Department
Texas A&M University-Commerce
P.O. Box 3011