Section News

Terry Blows Receives MAA Distinguished Teaching Award

Nominations Wanted for Next Year's Award

Nominations are wanted for the Southwestern Section's Teaching Award to be given next April, at our section meeting at NMT, Socorro, NM. There are excellent teachers in our section that should be recognized for their work!

Last year, in Tucson, John Hagood's nominee, Dr. Terence (Terry) Blows, for

The Mathematical Association of America Award for Distinguished College or University Teaching of Mathematics, was the section winner of this award. Dr. Blows is an outstanding teacher who has affected the learning of thousands of NAU undergraduate students from all departments as well as NAU's mathematics majors, MS students, and students from other institutions. Dr. Blows earned a PhD in

Mathematics from the University College of Wales, Aberystwyth in 1982. He has been a faculty member at NAU since 1984. He has earned the department teaching award three times

The SW section asks that you complete the same nomination form that is used for the national Haimo award, and our section's "distinguished teacher" nomination will be forwarded to the MAA for consideration for the Haimo award. A committee from our section will look at all nominations submitted for the SW Section award, and determine our section's nominee for the Haimo Award. With the permission of the person making the nomination, the nominated people who were not selected will again be considered for this honor next year (with the opportunity to update their nomination, if so desired).

Our section has had two of our nominees for the Haimo Award win this award: Deborah Hughes-Hallett, University of Arizona, won in 2004 and David Pengelley, New Mexico State University, won in 2008. It's time for another winner!!!

You can go to http://www.maa.org/Awards/haimo.html to find out more about the award, the eligibility requirements, and the materials that need

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to be submitted with the nomination. Any member of the SW Section may nominate any other member (self-nomination is not permitted). The completed nomination packet must be received by Joanne Peeples no later than January 31, 2013, she would appreciate it if you would let her know in December (or earlier) if you plan to nominate someone. The completed nomination packet should be mailed to Joanne at 6917 Orizaba Ave., El Paso, TX 79912. If you have questions you can email her at: joannep@epcc.edu or call 915.831.5047. —*Joanne Peeples, El Paso Community College*

MAA National News

Bill McCallum Wins Dolciani Award

William G. McCallum of the University of Arizona received the MAA's first Mary P. Dolciani Award at MathFest. The Dolciani Award recognizes a research mathematician in pure or applied mathematics who is making a distinguished contribution to the mathematical education of K–16 students.

Board of Governors Report

It is with pleasure that I attended the MAA Board meeting in Madison, Wisconsin on August 1, 2012 as the newly elected Governor of the Southwestern Section of the MAA. I wish to extend my thanks to Tom Gruszka for his service to the Southwestern Section of the MAA as Governor of our section.

Attendance at MathFest has been growing. In 2001, the last time MathFest was held in Madison attendance was around 1050. It has steadily grown, reaching a high of 1548 in 2010 at the Pittsburgh meeting. It was expected that attendance at the latest MathFest would exceed 1500.

The budget of the MAA is of course always a topic at the Board meetings. The MAA has been running a deficit for several years and there was considerable discussion regarding budget issues, both as regards expenditures and well as investing and fund raising.

One issue that was brought up was a decline in membership of the MAA, an issue which directly effects the budget. This is of concern and I hope that members of our section would recommend membership to their colleagues. The MAAs mission is to increase interest in mathematics at the collegiate level. Certainly our colleagues support this mission.

As with many organizations, the MAA is actively working on web design to better serve its members. One example of this is that MAA Bookstore moved its function to the MAA Web Store powered by Amazon.

Among the several motions that were passed at the Board meeting, I mention two of them.

- For the Board to send a message to the Council on Prizes and Awards that geographical diversity be considered more strongly when choosing award winners.
- All print journals of the MAA will move to a system of doubly-masked review,

under which editors make a good-faith effort to see that authors' names and affiliations are not explicitly present in manuscripts sent for review. Editors may set their own policies about how authors refer to their own work. Editors shall be given broad discretion to make exceptions. Current editors will not be required to change existing practice. The policy does not apply to online-only journals.

The next Board meeting will be held in San Diego, CA at the Joint Mathematical Meetings on January 8, 2013.
—*William Yslas Vélez, University of Arizona*

Department News
University of Texas at El Paso

In addition to high levels of grant and research productivity, department faculty have also been very active in organizing conferences. Christina Mariani co-organized the 4th annual Modeling High Frequency Data in Finance Conference, sponsored by NSF, ASA, IAFE, and IMU that was held at Stevens Institute of Technology, Hoboken this past July, receiving a letter of congratulation from New Jersey Congressional Representatives.

Behzad Djafari-Rouhani, Osvaldo Mendez, Son-Young Yi, Indranil SenGupta and Christina Mariani are co-organizing the 36th annual Texas Partial Differential Equations Conference on March 2–3, 2013, which will be held at UTEP for the first time. Also, Larry Lesser is on the Program Committee for the 2013 United States Conference on Teaching Statistics and Kien Lim and Art Duval helped co-organize a Teachers Teaching Teachers workshop for UTEP and EPCC.

The past year was also distinguished for faculty in terms of honors. Christina Mariani was appointed to the Shigeko K. Chan Distinguished Professorship in Mathematical Sciences, UTEP's most endowed academic position in this discipline. Kien Lim won a 2012 Regents' Outstanding Teaching Award from the nine-university University of Texas System, resulting in the fourth straight year the Department has had a winner of this rigorous award. Larry Lesser won the Scholarship of Teaching and Learning Award at the 2012 International Sun Conference on Teaching and Learning. Helmut Knaust received a 2012 "Millionaire Research Award" from

UTEP's ORSP for having sponsored research expenditures over $1 M in Fiscal Year 2011.

The department has also been successful in mentoring student research. By the end of the current school year (the program's fifth year), the interdepartmental program in Computational Science (directed by one of our faculty members) expects to have its first eight Ph.D. graduates. In addition to producing master's theses from its several programs, the department has also been active in mentoring undergraduate research, including having many students presenting their work in 2012 COURI symposia or the 2012 Southwestern Undergraduate Mathematics Research Conference.

The department is currently seeking to fill an Assistant/Associate Professor position in Statistics that would start in August 2013. The department has six faculty members in statistics and probability with over $6 million in funding as PI or co-PI for consulting, research, or teaching. This hire will play a key role in the statistics PhD program that is being proposed. For more information about the position, please see http://www.math.utep.edu/jobs/. —*Larry Lesser*

New Mexico Tech

Annette LaRussa has recently joined the department as a Mathematics Education Specialist. With funding from a grant from the US Department of Education, Annette will initially be working to redesign our precalculus and trigonometry courses. —*Brian Borchers*

Glendale Community College

The face of Glendale continues to change. In the last couple of years JoAnn Paderi, Robert Houatari, Bill Bonnell, and Carol Barner have retired. Denise Nunley transferred to Scottsdale CC and Amy Volpe left to try out high school teaching in Texas (she's back, but at Scottsdale CC). We've hired many to try to keep pace with all this activity. Brian Karasek (transferred from South Mountain), Nate Kurtz, Kirsten Joske, Janell D'Mura, Josh Whitney, Ashley Nicoloff, Sergio Ramirez, Randy Kostic and Bill Kimball have all joined us in fulltime positions.

On a sad note, we lost a long time member of the Math Department. Don McCarthy passed away unexpectedly this summer. He was a masterful teacher who inspired students. Don will be missed.

Enrollments are high and we are seeing more students in the upper level classes (200). The computer science and engineering programs are strong. The big change in Maricopa is at the Developmental Education level. Many colleges are working to find a solution to the low completion rates of students at this level. Plans are afoot to totally redesign Arithmetic Review, Beginning and Intermediate Algebra into a module format. —*Anne Dudley*

University of New Mexico

UNM Math and Statistics moved in Jan 2011 to its new home: the SMLC building (Science and Mathematics Learning Center). Our new chair Prof. Terry Loring took office in Fall 2011.

The 2012 UNM-PNM Math Contest (context XLV) first round will be held in November 2012 at schools throughout New Mexico, with the second round in the afternoon of February 2nd, 2013 at the UNM campus. It is a tradition to have a Public Lecture on the morning of the second round exam. This year the lecturer is Prof. Titu Andreescu from University of

Dallas, who is Assistant Coach of the USA IMO Team, Member of the IMO Advisory Board and the Director and Founder of AwesomeMath, which includes a summer program for students training to succeed at the Olympiad level. For more information visit http://mathcontest.unm.edu/.

On October 10–20, IHES Prof. Pierre Cartier, a former Bourbaki member, visited UNM and gave a public lecture "Mathematics in the 21st century, shall they be different", a colloquium and a seminar. We had other high profile visitors in the Fall: Prof. Martin Davis from Berkeley and Prof. Alan Newell from U. Arizona delivered beautiful colloquia, Davis talked about "Diophantine equations, Gödel incompleteness, and the higher infinite" and Newell about "Phyllotaxis and the universality of Fibonacci patterns". Prof. Clément Maria from Université Inria Sophia Antipolis-Méditarranée, France and visiting graduate student Anna Kairema from University of Helsinki gave talks in the geometry and analysis seminar respectively.

The Department of Mathematics and Statistics at UNM was awarded an NSF-MCTP grant ($1.2 million) to fund for four years (2012–2016): summer programs, undergraduate research projects during those academic years, graduate students and postdocs, and the undergraduate conference SUnMaRC. An outreach component promotes interaction between university and high school students, and also teaches clear presentation skills. This is the second MCTP grant the Department of Math and Statistics at UNM has received, the previous one funded activities 2008–2012. For more information see http://www.math.unm.edu/~nitsche/mctp/index.html.

The first MCTP Summer Camp for this cycle was held from July 4–August 3, 2012, and was kicked off with a BBQ. This program is designed to introduce undergraduate students to important ideas in both pure and applied mathematics, and also includes a focus on education. The Math Camp consists of 4 week-long minicourses in four areas out of algebraic structures*, Fourier analysis and wavelets, mathematical modeling*, numerical analysis, fluid dynamics*, disease modeling*, and mathematics education (the * ones were the courses offered in Summer 2012) taught by our faculty. One week will be devoted to each topic with a two-day break for field trips. Here we visit some of our national laboratories and institutes, and explore New Mexico. Participating students are supported with a stipend, per diem, and travel support and lodging for non-locals. For more information see http://www.math.unm.edu/~nitsche/mctp/summer/.

The first MCTP postdoc: Robert Niemeyer (an expert on fractals, PhD from UC Riverside under Prof. Lapidus) arrived in August 2012 and is heading, with the help of two MCTP Graduate Trainees Martha Byrne and Dusty Brooks, a teaching seminar for graduate students. He is helping with the math club, and has given a series of talks in the analysis seminar introducing "Fractal Geometry and Billiards on Fractals" to an enthusiastic audience of graduate students and faculty. The Department will be searching during Spring 2013 for a second NSF-funded MCTP postdoc to start Fall 2013. Please pass this information to promising candidates.

The department will host the 10th Southwest Undergraduate Mathematics

Research Conference, SUnMaRC 13, during March 1–3, 2013 (this is one of the activities funded by the NSF/MCTP grant). Interested undergraduates can check the website as updated information gets posted: http://www.math.unm.edu/~nitsche/mctp/sunmarc/2013.

The Department has been involved in a serious overhaul of the way our very first mathematics courses are taught. Mathematics Lecturer Tamra Mason is part of a group that is building a safety net at the University of New Mexico for students facing the uncertain depths and hidden obstacles of mathematics. Read more at: http://news.unm.edu/2012/09/unm-builds-safety-net-for-killer-classes/

Assistant Professor Janet Vassilev was the mentor for internationally recognized High School Science Fair project: "Completing Graphs" by Katherine Cordwell (1st place, Central New Mexico Regional Science Fair, 1st place New Mexico Science Fair 2012, 2nd Place AMS Award and 2nd Place in Mathematics at ISEF 2012.) —*Cristina Pereyra*

Pima Community College West Campus

Pima Community College–West Campus has added several more sections of MAT 089, the new course which is being taught in the emporium format. Torchilde Bulisache has been hired to coordinate the emporium staff. Another new course, MAT 123, has been added. It is a five credit class that covers Beginning and Intermediate Algebra in one semester. The text for MAT 123 is by Lial, Hornsby, and McGinnis. With the changes in the University of Arizona business mathematics courses, we are anticipating increased enrollment in MAT 212, Topics in Calculus. Several members of our faculty are planning to

attend the joint conference in San Diego in January. —*Paul Flasch*

Northern Arizona University

The university continues to grow as it has over the past five years or so, and enrollment now exceeds 18,000 on the Flagstaff campus and 25,000 at all sites. During this period, enrollment in Mathematics & Statistics courses has grown by about 50%.

The biggest news this fall, however, is the implementation of an emporium approach for some of our entry level courses, after a year of intense activity by a small group designing the approach. A suite of rooms in a relatively new building was dedicated to the Lumberjack Mathematics Center, as the emporium has been named, and outfitted with more than 200 computers. Arizona Governor Jan Brewer traveled to Flagstaff on September 20 to commemorate the official opening of the LMC. About 2000 students are currently being served by the LMC in courses preparatory to university-level mathematics and statistics courses, and in Quantitative Reasoning, our general education mathematics course. The courses either meet entirely in a computer lab setting with abundant help from instructors, graduate assistant, and undergraduate assistants, or have a hybrid structure meeting one hour each week face-to-face with an instructor along with a required time commitment in the computer lab. Two of the courses use MyMathLab and the third uses locally prepared online and print materials. Depending on our experience with the program this year, it is possible it will be expanded to other courses in the next few years. —*John Hagood*