SOUTHWESTERN SECTION NEWSLETTER

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Editor: Thomas Gruszka, WNMU, <tpeter@cs.wnmu.edu>

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1. CONGRATULATIONS TO DEBORAH HUGHES-HALLETT!

The 2004 nominee to the MAA for the distinguished teacher award from our section, Deborah Hughes-Hallett, won one of the three national awards. She will receive her national award and deliver a talk at the 2005 January Joint Math Meetings. Congratulations to Deborah!

2. CALL FOR NOMINATIONS FOR THE 2005 SECTIONAL AWARD FOR THE DISTINGUISHED COLLEGE OR UNIVERSITY TEACHER OF MATHEMATICS

Each year the Southwestern Section forwards one nominee to the MAA as our nomination for the Distinguished Teaching Award. At this time we are seeking nominations for the 2005 award from our Section. To be eligible, the nominee must be a member of MAA; must be a college or university teacher assigned at least half time during the academic year to teaching a mathematical science in a public or private college or university in the United States or Canada; and have at least five years teaching experience in mathematical science. The nominee should be widely recognized as extraordinarily successful in their teaching, have their teaching effectiveness documented, have influence reaching beyond their own institution, and foster curiosity and generate excitement about mathematics in their students. We will recognize the winner from our Section at the April Section Meeting in El Paso, and will forward this nomination as our Section's official nominee for the Deborah and Franklin Tepper Haimo Distinguished Teaching Award.

More information about the award as well as the necessary nomination form can be found online at http://www.maa.org/Awards/haimo.html. Completed nomination forms should be sent to Joanne Peeples, Chair, Teaching Award Committee for SW Section of MAA, 6915 Orizaba, El Paso, TX, 79912 (ph: (915) 831-5047; email: JoanneP@epcc.edu) by January 25, 2005.

3. TENSOR GRANT AWARDED

Joanne Peeples (EPCC) and Hamide Dogan-Dunlap (UTEP) have been awarded an MAA Tensor Grant. The purpose of the Tensor Grants is to encourage women in mathematics. This grant will work with six high school women, six undergraduate women, and three women graduate students, and it will focus on women mathematicians. A play will be written about several women mathematicians (about 6 or so) portraying their life as well as their work. Also, a performance will be scheduled at the Spring 2005 SW-Section Conference at UTEP. Suggestions are welcome from people who have written and/or performed plays before; please contact Joanne <JoanneP@epcc.edu> or Hamide <hdogan@utep.edu>.

4. SECTION MEETING, APRIL 2005 Hamide Dogan-Dunlap <hdogan@utep.edu>

The 2005 Meeting of the Southwestern Section of the MAA will be held April 1-2 at the University of Texas at El Paso. One of the featured speakers will be Bruce Palka from the Department of Mathematics at the University of Texas at Austin. Bruce is the editor of the American Mathematics Monthly.

The conference organizers are looking into running sessions on a wide range of topics: content mathematics, undergraduate mathematics education, and preK-12 mathematics education of preservice teachers. Proposals for minicourses, workshops, special sessions or other events should be submitted by January 14, 2005. Titles and abstracts for talks (generally 20-25 minutes in length) are due by March 11, 2005. Please send submissions to Hamide Dogan-Dunlap via email <hdogan@utep.edu> or hard copy (University of Texas at El Paso, Mathematical Sciences, Bell Hall 302, El Paso, TX 79968). For more information call Hamide at 915-747-6769.

5. NMMATYC CONFERENCE 2005

The New Mexico Mathematical Association of Two-Year Colleges (NMMATYC) will be holding its sixteenth annual conference May 19 - 21, 2005 at NMSU-A in Alamogordo, New Mexico. The conference theme is "Exploring the Mathematical Galaxy." More information will become available on the NMMATYC webpage http://www.nm.matyc.org/> as the year progresses.

6. SECTIONAL NEWS

Arizona State University (by Matt Isom <isom@asu.edu>)

The Mathematics and Statistics Department at Arizona State University has removed college algebra from the list of courses students can use to fulfill their numeracy requirements for general studies. The department has taken this action as it believes students requiring only one mathematics course in their college experience should be introduced to mathematics that is more applied in nature. We further believe any student taking college algebra should have every intention of taking another mathematics course. This second course is typically brief calculus and fulfills the 'applied mathematics' expectation used to fulfill general studies criteria. This change will go into effect fall 2005.

A rather unexpected change has also taken place within the First-Year Mathematics division of the department. Our President of the University, Dr. Crow, has enacted a plan (Project 85) to cap many of our 100 level courses across campus at 19 students. This is a serious attempt to improve the quality of undergraduate education and student success in their freshman year and student persistence from the freshman to sophomore years. Currently, we have 62 sections of MAT 114 (College Mathematics) and 95 sections of MAT 117 (College Algebra) being taught with 19 students in each classroom. We have been told this commitment to undergraduate education is a multi-year plan and we will need to bring in even more faculty to cover the larger number of classes created in the future. This past year the FYM faculty grew in numbers from 41 at the start of the fall 03 semester to 52 fulltime faculty at the start of this semester. The next round of scheduling will focus on spreading the caps of 19 throughout the FYM course offerings.

Eastern New Mexico University (by Kathleen Salter <Kathleen.Salter@enmu.edu>)

Dr. Regina Aragon was promoted to Professor; Drs. Hamid Allamehzahdeh and Mir Mortazavi have been granted tenure and promoted to Associate Professor.

The Eastern New Mexico University (ENMU) Computer Science, Engineering and Mathematics Scholarship (CSEMS) project is supporting talented but financially needy students in the Department of Mathematical Sciences. For the academic year 2004-2005 scholarships ranging from \$1,760 to \$3,000 were awarded to 20 students.

El Paso Community College (by Joanne Peeples <JoanneP@epcc.edu>)

El Paso Community College welcomed three new tenure track faculty in Mathematics this fall semester. Xiaomin Wang will be teaching at the Transmountain Campus, and Pilar Gimbel and Huili (Helen) Wang will be teaching at the Valle Verde Campus. This fall we have a total of 24,297 students registered at our five campuses, and have a growth rate that is faster than any other community college in Texas (we have grown by over 37% in the last five years).

New Mexico State University (by Robert Smits <rsmits@nmsu.edu>)

Susana Salamanca is involved with a professional development group which is being formed between NMSU and some Southern NM High Schools. The ongoing group anticipates that it will focus on analyzing teachers' teaching practices and their effect on students' learning.

Mathematically Connected Communities, a joint effort involving faculty members from the Department of Mathematical Sciences and the College of Education, has been awarded a three-year contract by the Public Education Department of New Mexico. This partnership includes twenty-five school districts from around the state, as well as Western New Mexico University and Eastern New Mexico University, Ruidoso. The goal of the project is to work with middle school mathematics teachers to improve their students' mathematical knowledge and expand the teachers' understanding of mathematics. The program is receiving funding of almost \$1,600,000 after receiving almost \$400,000 more than the original budget requested, to allow us to work with school districts in the northern part of the state. The members of the mathematics department involved in the program are Dave Finston, Doug Kurtz, Pat Morandi, Bruce Olberding, Ted Stanford, Tony Wang, and Linda Zimmerman.

The Seventh New Mexico Analysis Seminar will take place October 14-15, 2004 at the University of New Mexico. The keynote speakers are Patricia Bauman, Purdue University who will talk on "Analysis of Ginzburg-Landau Models with Applications to Materials" and Luca Capogna, University of Arkansas who will talk on "Mean curvature flow in the Heisenberg group and applications." Following on the 16th and 17th of October are special sessions of the AMS also in Albuquerque. The organizers of the conference are Cristina Pereyra from the University of New Mexico, and Joseph Lakey, Tiziana Giorgi, Adam Sikora and Robert Smits from New Mexico State University. The NMAS will be supported for the next two years thanks to a grant from the National Science Foundation.

Northern Arizona University (by John Hagood <John.Hagood@NAU.EDU>)

John Hagood, Janet McShane and Nandor Sieben received a grant from the Arizona Board of Regents (ABOR) to implement the online homework system WeBWorK in our calculus sections. It is now being used in Precalculus, Calculus I, and Calculus II, and has been used in Linear Algebra. All faculty users and almost all student users are very pleased with the system. Another grant has been awarded to John Neuberger and Nandor Sieben to develop a Moore Method course in scientific computing.

Cynthia Hernon is a visiting professor in the department, specializing in mathematics education. She completed her doctorate at the University of Nevada at Las Vegas.

As part of an internal consolidation of college and school units, the department has become part of the new College of Engineering and Natural Sciences. Reorganization of the universities in Arizona and possible creation of additional four-year colleges or universities is under consideration by ABOR. Stay tuned for the latest on this issue.

Our newly redesigned Master of Arts in Teaching degree, with a substantial online focus, is now being offered, and has generated substantial interest and enrollment.

University of Texas at El Paso (by Hamide Dogan-Dunlap <hdogan@utep.edu>)

The Bioinformatics Program at the University of Texas at El Paso (UTEP) was established in 2001 to offer a new Professional Science Master's degree in bioinformatics. In 2004, faculty members from various disciplines of Biology, Chemistry, Computer Science, Mathematics and Statistics formed the Bioinformatics Research Committee. Their aim is to strengthen the program's research component in student training to meet the challenges in many fast growing industries in diverse areas of genomic and pharmaceutical research. In bioinformatics research, good mathematical and computational skills are required in jobs involving management, analysis, and interpretation of biological data. For more details, please visit UTEP Bioinformatics at <www.bioinformatics.utep.edu>.

7. THE NEWSLETTER BY EMAIL

If any member of the Southwestern Section would like to receive the sectional newsletter by email INSTEAD of through the postal service please email the editor <tpeter@cs.wnmu.edu>) with the words EMAIL PLEASE in the subject heading or the body of the message. The newsletter is published twice a year, once in the fall and once in the spring.