NEWSLETTER OKLAHOMA/ARKANSAS SECTION Volume XXII, No. 1 February 2001

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NOTES FROM THE SECRETARY-TREASURER

Robert McMillan

This newsletter contains information about the March 2001 meeting at Oklahoma Christian University in Oklahoma City, OK. Plans are in place for most of the special features of our meeting. Information about registration, abstract forms, hotel and motel reservations, and maps to the campus can be found on two websites. The first of these is from maa.org/sections/OK-AK and the other is oc.edu/faculty/jason.holland/Maa.htm.

Please note the deadlines for abstracts (March 1, 2001) and registration (March 26, 2001). A program should come to all active MAA members as of August 2000. This is the latest address list I have.

We have some good speakers and topics lined up for this meeting. Tina Straley, Executive Director of the MAA, will present the Invited Address on The MAA and College Mathematics: Where will we be in 2010? The two workshops this year are both free and sound helpful and interesting. The first is for faculty from the Washington Office of the MAA on Successful Grant Writing. I am hoping many of you will take advantage of this workshop. The second is for students from a mathematics major and meteorologist. Please encourage your students to come. It would help if you would let us know in order to provide the right kind of facilities. It looks like we will have an excellent N. A. Court Lecturer this year. David Cox, Amherst College, will present Tangents to Four Unit Spheres.

This year I am resigning as Secretary-Treasurer of the OK-AR Section. I have enjoyed being in this position for the last 5 years. It has been exciting getting to know so many good people in our organization. You have been so helpful in carrying out your assignments and that has made it much easier for me. I appreciate this opportunity.

AWARD FOR DISTINGUISHED COLLEGE OR UNIVERSITY TEACHING OF MATHEMATICS TO PROFESSOR JOHN WATSON



At its annual Spring meeting held at Arkansas Tech University in Russellville, Arkansas, the Oklahoma-Arkansas section of the Mathematical Association of America announced Professor John Watson as the recipient of the Award for Distinguished College

or University Teaching of Mathematics. Dr. Watson received the award on his home campus where he has taught since 1978 and served as the Head of Mathematics Department since 1982.

In addition to his success in teaching mathematics at Arkansas Tech University, Dr. Watson believes two other things are essential to being a successful teacher. They are active involvement in the profession beyond the confines of one's own institution, and teaching outside the confines of the list of courses in the catalog. Dr. Watson is a member of several professional organizations and has been actively involved in the OK-AR Section of the MAA and is the current Governor for the Section. His past service has included chairing the Section, the Department Chairs meeting, Faculty Workshop Committee, and the N.A. Court Lecture Committee to name just a few.

Dr. Watson is also active at the state level. He has been an invited speaker at the Arkansas Mathematics and Science Leadership Conference, served on the Arkansas Math Crusade Steering Committee, and was a Governor's appointee to the NSF-SSI Steering Committee.

In attempting to meet the learning needs in mathematics that lie outside the usual list of courses in the catalogue, Dr. Watson has been involved in working with the public school system. He has conducted summer camps for 4th and 5th graders, coached the Russellville Gardner Junior High MathCounts team, and conducted workshops for secondary teachers on teaching AP Calculus. In the summer of 1999, he organized a workshop for secondary teachers on Pre-AP mathematics. He has been project director for seven

grants that supported either the AP workshops or Arkansas Math Crusade workshops.

During his teaching career of 20 plus year, Dr. Watson's teaching style has evolved from a primarily lecture format to one which strives to achieve a balance of lecture and active involvement by the students. Believing that "math is not a spectator sport", he now includes group work, individual work by students, or board work during approximately half of each class period. "Passively listening to a lecture seemed to work when I was a student", he says, "but most of today's students need to be active participants. This calls for a different teaching style, one that requires the student to take an active role in class."

The following are some comments from Dr. Watson about teaching:

I enjoy seeing the students in my general education math class learn to appreciate mathematics. One of my goals is not to make them "like" math, but rather appreciate its value in their life and in society.

I practice the principle of "continuous improvement" in my teaching. I continually evaluate my methods and expectations to determine how I can do a better job next semester.

Learning is a life long endeavor. To be a good teacher one must never stop learning. In 1989 I started taking Spanish, one class per semester when my schedule allowed. I finished a BA in Spanish in May 1997. It was a valuable experience for me to remember what it is like to be on "the other side of the desk".

CAMPUS NEWS AND NOTES

Arkansas Tech University Submitted by John Watson

Mr. Charles Pearson is retiring in May after more than 30 years teaching at Tech.

Dr. Kathy Pearson recently completed her EdD in Higher Education from Nova Southeastern University. Dr. Jill Guerra is returning this spring semester after a threesemester leave to conduct research at the Royal Institute for Advanced Study in Stockholm, Sweden.

Henderson State University Submitted by William Durand

Dr. Carolyn Eoff received a NSF grant last year to create a Mathematics Teaching Laboratory. This has been completed and we have completed our first semester teaching our calculus classes in the lab. This lab has 20 computers, a multimedia station, and a color printer. Dr. Eoff will be presenting at a poster session at the winter mathematics meeting in New Orleans in January 2001.

Mrs. Sherry Lane, Director of our Mathematics and Science Center along with William Durand has created a Mathematics Education Laboratory. All our mathematics education courses will be taught in this lab. It has tables to better facilitate the use of hands-on activities. We have shelves in the lab so that we can store all our manipulatives, calculators, and hands-on materials so that they are readily available. When the lab in completed we will have five computers available for students so they will be able to use different computer software programs.

Cindy Wilson, who had been on a year's leave as our Secondary Mathematics Specialist, decided to come back to the faculty this fall. We are certainly happy to have Cindy back since she primarily works with our elementary mathematics program. We were fortunate to be able to hire Ms. Debbie Hill to replace Cindy. Debbie received her master's degree at HSU in the early nineties and had been teaching at Benton High School.

Dr. Debra Coventry and her husband Jeff are expecting this first child early next year. Debra had to be off the last three weeks of the semester but things are going well for she and the baby now. Debra will be taking the spring semester off.

Ms. Carey Harris and her husband Mike welcomed a little girl into their family in early December. Carey was expecting the child to come in early January but the baby had other plans. Carey and the baby are doing great. Carey is an instructor in computer science and she too will be taking leave in the spring semester. Jimmie and Kim Harper, computer science faculty members, had a baby boy in July of this year. Kim was back teaching two days a week for us in the fall. The baby is doing well.

The mathematics faculty and some of the science faculty are in the process of creating a Middle School Math/Science degree program. We hope to have it implemented for the Fall of 2001. This program is in response to new licensure requirements at the State level. Many other universities in Arkansas have developed similar degree programs.

Cindy Wilson piloted a class in college algebra using the Cognitive Tutor this past semester. We are awaiting the results on this project. Dr. Duane Jackson and Dr. Fred Worth taught Intermediate Algebra using a tutoring program this semester and we are looking at the results in this project. It seems we, like many other schools, have trouble with our Intermediate Algebra program. We are still searching for answers. If anyone has the magic touch we would appreciate your sharing it with us.

William Durand presented four workshops at a conference for East Texas and Southwest Arkansas in October of this year and one workshop at the Arkansas Council of Teachers of Mathematics meeting in Little Rock in November. He will also be giving a presentation at the national meeting of the National Council of Teachers of Mathematics in April 2001.

Hendrix College Submitted by Dwayne Collins

We hired Duff G. Campbell as an Assistant Professor of Mathematics. Duff received his B.A. in mathematics from Harvard University and his Ph.D. in mathematics from Boston University in 1997 where he received a Graduate School Prize for Excellence in Teaching. He taught at the United States Military Academy as an Assistant Professor for three and one half years before coming to Hendrix.

Northeastern State University Submitted by Joan E. Bell

Dr. Billy Fullbright, Professor of Mathematics, retired at the end of the summer semester. Dr. Vir Phoha left NSU for a research/teaching position at Louisiana Tech University.

We have three new mathematics faculty members: Dr. Wendell Wyatt, Norman Bryant, and Randy Snider. Dr. James Beamer was promoted to Associate Professor of Mathematics.

We are looking to fill two positions, one in mathematics and the other in computer science.

Oklahoma Christian University Submitted by Robert McMillan

The Department of Mathematics has a new faculty member beginning this fall, 2000. He is Dr. Jason Holland. Jason received his Ph.D. in mathematics from the University of Mississippi in 1998. His major area of interest is Functional Analysis and his thesis title is "The Orthocompletion and the Dedekind Completion of Certain Lattice-Ordered Groups". Jason spent two years at Abilene Christian University before coming to OC.

We have also hired for the fall, 2001 a new faculty member in mathematics education. Her name is *Phyllis Bolin*. She is scheduled to complete her Ph.D. in the spring or summer of 2001 at The University of Oklahoma.

Dr. Richard Greenhaw has decided not to return to full time teaching with us but is an Adjunct Professor teaching one class each semester this year.

Dr. Robert McMillan has asked for early retirement due to health reasons. He will not retire until the end of the current year's contract, which goes through August 2001. He plans to teach as an Adjunct Professor if possible.

OC still has an opening for a Ph.D. in mathematics. If you know of someone who is interested please have him or her contact Dr. Ben Hutchison, Dean of the College of Engineering and Science.

Besides hosting the OK-AR Section meeting this spring the department has applied for another Eisenhower Grant for Junior High Mathematics Teachers.

Oklahoma City Community College Submitted by Ken Harrelson

The mathematics department hired two professors in the fall. Ken Harrelson joins the department with 10 years teaching experience. Ken has taught at Northwestern Oklahoma State University and Westark College. He has a Masters in Applied Mathematics from Oklahoma State University.

The other new faculty member is Paul Lewis. Paul worked three years for American Fidelity Insurance before joining the department. His educational work experience includes Oklahoma University, Rose State College, St. Gregory's and OKCCC. He has a Masters in Mathematics from the University of Oklahoma. In his spare time he is studying to become a deacon in the Catholic Church.

Phyllis Faw retired at the end of the fall semester.

Chris Oehrlein and Jay Malmstrom presented "Integrating Projects into the College Algebra Curriculum" as part of the "Redefining What A Modern College Algebra Experience Is" session at the Joint AMS/MAA meeting in New Orleans. Jay also presented a paper titled "A Generalized Division Check Algorithm" and moderated a panel discussion on Teaching To Attract New Teachers.

Oklahoma State University Submitted by Benny Evans

Sadly we must report that Professor Emeritus Jeane Agnew passed away on May 8, 2000. Many people in this region had associations with Jeane. In fact many mathematics professors in the region are her former students. Her presence is much missed.

We have two new Assistant Professors at OSU. Jiahong Wu received his Ph.D. from the University of Chicago in 1996. He came to OSU after completing postdoctoral work at the Institute for Advanced Study and the University of Texas at Austin. Jiahong works in fluid dynamics. Anthony Kable received his degree from Oklahoma State University in 1997 and is currently completing a postdoctoral appointment at Cornell. Anthony is a number theorist and is the first OSU graduate who has been granted a faculty position since the appointment of John Jobe over 35 years ago.

Zhenbo Qin resigned his Associate Professor position to take a job at the University of Missouri, and Xianghong Gong resigned his Assistant Professor position to take a job at the University of Wisconsin. Both will be missed.

Igor Pritsker was awarded the Oak Ridge Universities Junior Faculty Award. This is the first time this honor has been won by an OSU faculty member since Zhenbo Qin won it ten years ago. Jim Choike received local, regional, and national awards for his Getting Ready for Algebra program. These included the UCEA Program of Excellence Award, the ACHE Exceptional Program Award, and the OSU Faculty Excellence Award. Sheldon Katz in collaboration with Vafa and Yau of Harvard has received a \$1,000,000 grant to continue a study of algebraic geometry and physics.

Dave Witte was promoted to Professor of Mathematics. Jim Cogdell was appointed Regents Professor of Mathematics, and Weiping Li was promoted to Associate Professor of Mathematics.

Brian Conrey remains on leave as Director of the American Institute of Mathematics. We anticipate his return to OSU after next year. Carel Faber is on leave at KTH in Sweeden. Both Dave Witte and J. T. Chang are on leave for the spring semester.

Oral Roberts University Submitted by Roy Rakestraw

Dr. Andrew Lang continues as ORU's NExT Fellow and has co-authored a paper with Dr. Halsmer (Engineering/Physics) titled "Optimal Design of Passive Coning Attenuators for Spinning Spacecraft Under Thrust" under NASA sponsorship.

Two faculty left ORU in the summer of 2000: Mr. Jim McGinnis retired and Ms. Susan Carr moved with her family to Denver. As they left, two new faculty arrived: Dr. Teresa Williams and Ms. Leigh Anne Locke.

Dr. Roy Rakestraw is surviving his first year as department chair while Dr. Debra Sowell (former chair) is serving as Dean of Instruction

Southeastern Oklahoma State University Submitted by Charles Matthews

This year Dr. Karla Oty has stepped down from the position as chair of the mathematics department, and Dr. Brett Elliott has accepted the position.

NASA awarded Dr. Linda Kallam, along with two professors from the physical sciences, a Project NOVA grant funded. The grant, Inquiry-Based Science and Mathematics for Elementary Education Majors, focuses on improving the science and mathematics content knowledge and pedagogical skills of elementary preservice teachers.

Dr. Charles Matthews was awarded two Faculty Senate Recognition Awards for the 1999-2000 academic year: one for teaching and the other for research. Each award is given annually to one faculty member per school and comes with a \$500 account for expenses.

University of Arkansas at Fayetteville Submitted by William A. Feldman

Jeff Hogan and Yo'av Rieck join us this year as tenure-track Assistant Professor. Jeff joins comes to us from Australia where he served as Research Fellow at Macquarie University. Jeff completed his Ph.D. at University of New South Wales and his research interests are in applied and computation harmonic analysis. Yo'av spent last year as a postdoctoral fellow at Oxford University. His completed his Ph.D. at the University of Texas and his research interests are in topology.

Several faculty members are on leave this year. Chaim Goodman-Struass is at Princeton this fall and will be in Mexico in the spring. Yo'av Rieck will be in Japan for one year beginning in January. Mark Johnson is spending the year at the University of Nebraska. Bernie Madison will be on leave at the MAA for the spring. Bill Feldman will be on leave this spring at various venues - India in January.

Jim Dunn will be retiring this summer.

The department will be sponsoring its 25 Spring Lecture Series featuring Professors Luis Caffarelli and Rafael de la Llave from University of Texas, Austin. The title of this year's program is "Solutions of Partial Differential Equations in Periodic Media" and is supported in large part by a grant from the National Science Foundation. The series will take place April 26-28, 2001 in Fayetteville. For more information contact Luca Capogna, Loredana Lanzani, or Itrel Monroe.

University of Central Arkansas Submitted by Donna Foss

Dr. Guy Bernard obtained his Ph.D. in mathematics in 1993 from University of Minnesota. He joined the department at UCA in fall 2000 after Visiting Assistant Professor positions at Arcadia University in Nova Scotia and Penn State University. His specialty is partial differential equations.

Dr. C.K. Chen joined the department in fall 2000. He graduated from the University of Utah with a Ph.D. degree in applied mathematics in 1998. After five years as Research Fellow at Utah, Dr. Chen was a Postdoctoral Research Associate and then received a one-year appointment as Visiting Assistant Professor at Brigham Young University. His research is mainly in differential equations.

Dr. Reza Ahangar is a Visiting Professor in the department. He came to the department from Piedmont College in Demorest, Georgia where he taught for ten years. He received his Ph.D. in Applied Mathematics from the Catholic University of America in Washington D.C. in 1982.

Nancy Murphy joined the Intermediate Algebra faculty in fall 2000. She received her Bachelor of Science in 1992 and Master of Arts in Mathematics Education in 1999 from UCA. Her five years of experience as a mathematics teacher at Conway High School East has greatly enhanced her teaching of intermediate and college algebra in our department.

Mary Wood received a one-year appointment to the Intermediate Algebra faculty in the department in fall 2000. She received her Bachelor of Science in 1976 and Master of Science in Mathematics in 1977 from UCA. Ms. Wood worked the past 21 years for Entergy Corporation in various capacities, mostly analytical projects in engineering, economic analysis, and marketing.

After many years of part-time teaching in the department, Rita Fielder joined the department faculty as a full-time instructor for fall 2000. Ms. Fielder received her Bachelor of Science in Education and Masters of Science in Education from UCA. She has been teaching in various locations in Arkansas for several years.

Dr. Danny Arrigo was selected as a member of the Faculty for the 21st Century, P-KAL F21. Dr. Arrigo is in his second year at UCA. He has his Ph.D. in applied mathematics form Georgia Tech.

University of Central Oklahoma Submitted by David Bridge

As has been the trend for the past several years, UCO continues to welcome new faculty members while bidding farewell to departing faculty members. New to the department this year are the following:

Ms. Sherri Avery joins the department this year as a full-time instructor. For the past several years Ms. Avery has successfully taught as an adjunct faculty member.

Dr. Dana Craig earned her Ed.D. last year from Oklahoma State University, and joins the department as a full-time faculty member after three years' of temporary service. Dr. Craig is rapidly rising as departmental leader in the area of Mathematics Education.

Dr. Carol Lucas comes to the department with a Ph.D. in Curriculum and Instruction: Mathematics Education from the University of Kansas (Lawrence), and she has expertise in the teaching of algebra.

Dr. Larry Lucas is joining the department with a Ph.D. in Mathematics from the University of Missouri, and with several years of experience both in and out of the classroom, most recently at Haskell Indian Nations University in Kansas.

Dr. Michael Scott McClendon earned his Ph.D. in Mathematics this past May from the Univ. Louisiana – Lafayette. He also possesses several years of teaching experience.

Dr. G. Kay Powers returns to the department this year at a very critical time of growth. She is able to supply mentorship and guidance for new faculty members as well as classroom expertise for our students.

Three long-time members of the department, Ms. Sue Ann Goodman, Dr. Sam Hankey, and Mr. Monty Roberts, announced their retirement effective at the end of Spring 2000 on the heels of a university-wide retirement incentive. Ms. Goodman was a valuable contributor to the teaching of entry-level courses such as College Algebra. Dr. Hankey was chair of the Mathematics Education Committee and a versatile teacher at all levels. Mr. Monty Roberts was chair of the Personnel Committee, and is largely responsible for the many excellent new faculty members hired during the past several years.

The department suffered a tragic loss on May 11, 2000 when Professor Thomas Morrison Campbell, aged 62, died as a victim of Guillain-Barré Syndrome. Professor Campbell was a member of the department since 1989, and served as the Assistant Department Chair since 1997. He is survived by, among others, his wife Alida and his son, Kord, a recent alumnus of the college.

Effective July 1, 2000, Dr. Charles Cooper became the second Assistant Department Chair. Dr. Cooper served the department as acting Assistant Department Chair for much of the Spring 2000 semester, and served as Acting Chair in the absence of the chair for two weeks in February 2000.

Last April, the department organized and hosted the first of many Math Trails on UCO's campus. This continues to be an ongoing project between the department and various LEA's.

On February 23-24, 2001, the department will be hosting the Conference on Applied Mathematics (CAM*2001). Featured speakers include Ingrid Daubechies (Princeton University) who will be speaking on wavelets, and Martin Golubitsky (University of Houston), who will be speaking on Oscillations in Coupled Systems and Animal Gaits.

University of Oklahoma Submitted by Paul Goodey

The Department welcomed two new visitors last year. They are Dr. Gary Schwartz and Dr. Bogdan Vajiac. Gary received his Ph.D. in 2000 from the University of Illinois and replaces Brent Gordon during the latter's time at NSF. He works in representation theory of finite groups. Bogdan received his Ph.D. in 1997 from the University of Notre Dame and holds a new postdoctoral position. He works in finite group actions on topological manifolds. They have already made considerable contributions to the intellectual atmosphere in the department.

Professors Breen, Kelley and Wei had sabbatical leaves during the year. Marilyn Breen visited the University of Washington and the University of California, Davis. Walter Kelley visited the Universities of Delaware, Nebraska and Washington. Walter Wei visited the Universities of Princeton and Toledo as well as the Hong Kong University of Science and Technology and the Institute of Mathematics Academia Sinica. All seemed to have thrived as a result of this hallowed academic practice.

Also on leave during the year were Professors Gordon and Xu. Brent Gordon is currently working at the NSF as a Program Director in the Algebra and Number Theory program. Feng Xu has been visiting the Institutes Mathematiques Luminy in France and the Mathematical Sciences Research Institute, Berkeley.

Congratulations go to Dr. John Albert for his promotion to Full Professor. We also congratulate Dr. Paul Goodey on becoming Edith Gaylord Harper Presidential Professor of Mathematics, Dr. Ruediger Landes on his invitation to join the Editorial Board of Abstract and Applied Analysis and Dr. Curtis McKnight on his election to membership of the American Mathematical Society's Committee on Education. We send best wishes to Dr. Elena Black for her future Actuarial Career. Elena

resigned from the faculty in Summer 2000.

The Department gave thanks, at a party in May, to Kevin Grasse for his skillful leadership as chair over the past six years. He is now observed at all department meetings wearing a broad grin. Paul Goodey succeeded him as chair on July 1.

The graduate program produced one of its best crops of PhD's. Seven doctoral degrees were awarded during the year. We congratulate all the recipients: Mohamed Allali, Linda Braddy, Hamide Dogan, Weigong Jiang, Lourdes Juan, Ali Mirafzali and Lei Zeng. It was also an excellent recruiting year due, in part, to the inception of the OU Mathfest. This recruiting weekend for graduate students proved very successful and will be repeated in 2001 on an even grander scale.

COMING ATTRACTIONS SPRING MEETING MARCH 30-31

Invited Address: Tina Straley, MAA Executive Director Topic: The MAA and College Mathematics: Where will we be in 2010?

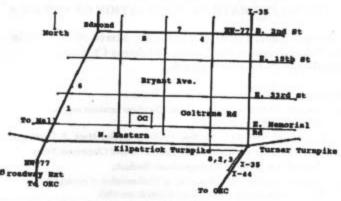
Abstract: Many changes are taking place across the nation not only in technology but also in mathematics and computer science departments. Prof. Straley will discuss these changes and help us understand what is needed for the near future.

N.A. Court Lecturer: David A. Cox, the Andrew W. Mellon Professor of Mathematics at Amherst College

Topic: Tangents to Four Unit Spheres

Abstract: Given four unit spheres in three-dimensional space, how many lines are simultaneously tangent to all four spheres? This problem arises in various contexts (including computer vision) and has connections to many parts of mathematics. In this talk he will show that if the centers of the spheres are in general position, then the answer is at most 12. He will also introduce some basic ideas and techniques from enumerative algebraic geometry.

Accommodations near Oklahoma Christian University



Hotel (Miles to OCU)	Phone Number	Rate: Single/Double		
Sleep Inn Edmond Solve S. Broadway Ext. (2 mi)	(405) 844-3000	\$55.00/55.00 + tax OK/AR Section rates		
2. Comfort Inn OKC 4625 N.E. 120 th (3 mi)	(405) 478-7282	\$58.50/63.00 + tax		
3. Days Inn OKC 12012 N. I-35 (3 mi)	(404) 478-2554	\$60.00/67.00 + tax		
4. Best Western Edmond 2700 E. 2 nd (3.5 mi)	(405) 216-0300	\$57.95/57.95 + tax		
5. Ramada Plaza Hotel Edmond 930 E. 2 nd (3.1 mi)	(405) 341-3577 1-800-322-4686	\$59.00/59.00 + tax		
6. Stratford House Inn Edmond (2.5 mi) 3032 S Broadway Ext.	(405) 340-5693	\$39.95/41.98 + tax		
7. Strat ford House Inn on 2 ^{ud} Edmond 1809 E. 2 nd (2.9 mi)	(405) 340-8197	\$40.00/46.00 + tax		
8. Motel 6 OKC 12121 N. 1-35 (3 mi)	(405) 478-4030	\$31.99/37.99 + tax		

OKC tax rate is 9.88% and Edmond is 11.375%. All motels have continental breakfast except Motel 6. The Sleep Inn, Best Western, Days Inn, and Comfort all have indoor pools and the Stratford Inns have whirlpool baths. There are approximately 40 restaurants/fast food places on HWY-77.

Preliminary Announcement of the Sixty-Third Annual Meeting of the Oklahoma-Arkansas Section of THE MATHEMATICAL ASSOCIATION OF AMERICA

Time and Place: Friday and Saturday, March 30-31, 2001 in the Prince Engineering Center, Oklahoma Christian University, Oklahoma City, OK.

Program: Sessions of Contributed Papers:

- General Sessions: Subject matter for these sessions may be from any part of mathematics.
- 2-5. Special Sessions: Algebra, Analysis, Applied Math, & Topology.
- 6. Special Session: Mathematics Education and Classroom Notes.
- 7. Special Session: By Undergraduate Students.
- Special Session: The Teaching of Mathematics. (Contact Dr. John Watson, presider, John Watson@mail.atu.edu)

This is your invitation to present a paper at our 2001 MAA section meeting. Deadline for the abstract of your paper for Sessions 1 - 8, is Thursday, March 1, 2001. You should indicate the particular session in which you desire to present your paper though some adjustments in requests may be necessary. Time allowed per paper is 15 minutes. An Abstract Form is included in this newsletter. They can also be obtained from the website or Robert McMillan. They should be mailed directly to Robert McMillan, Oklahoma Christian University,

Department of Mathematics, Box 11000, Oklahoma City, OK 73136-1100. Phone: 405-425-5414, Fax: 405-425-5446.

e-mail: robert.mcmillan@oc.edu

Invited Address: Tina Straley, MAA Executive Director, Washington, D.C.

Topic: The MAA and College Mathematics: Where will we be in 2010?

N. A. Court Lecturer: David A. Cox, the Andrew W. Mellon Professor of Mathematics at Amherst College, Amherst, MA. Topic: Tangents to Four Unit Spheres.

Faculty Workshop: Jeff Knisely, East Tennessee State University, Johnson City, TN. Friday Morning, 8:30-11:00 Topic: Successful Grant Writing (Free workshop provided by MAA). Student Workshop: Matt Miller, KAMC and KLBK television in Lubbock, TX. Friday Morning, 8:30-11:00 Topic: Mathematics Breathes Life to the Field of Meteorology

Banquet: (Reservations are needed by March 26, 2001.)
Dinner will be at 6:00 p.m. on Friday Evening in the Gaylor
University Center Dining Room. Cost \$15.00. Please helps by getting your reservation in by the deadline.

Luncheon Meetings: (Reservations are needed for these luncheone.)

- Department Chairs/Heads/Liaisons, 11:30 Friday, Gaylord University Center Bartlesville Dining Room. Cost \$8.00.
 - Presiding: David Bridge, University of Central Oklahoma.
- Faculty Sponsor's of Student Chapters, 11:30 Friday; Gaylord University Center Cordell Dining Room. Cost \$8.00.

Presiding: Cassandra Cox, University of Arkansas at Little Rock

Reservations for the Banquet or Luncheon Meetings must be received by March 26, 2001.

Registration Fee: Regular - \$10, Students - \$2, (No P.O.'s please) payable in advance or at registration in the Prince Engineering Center lobby, Friday 8:00 a.m. - 5:00 p.m. & Saturday, 8:30 a.m. - 12:00 p.m.

There is also a voluntary contribution registration available - \$25, which includes the OK-AR MAA Section History. In addition, please note that Regular Absentee Registration is requested of each section member not attending. An absentee or early registration form is included with this newsletter.

Please mail your check and registration form to:

Dr. Don Leftwich Department of Mathematics Oklahoma Christian University Box 11000

Phone: 405-425-5413 FAX: 405-425-5446 e-mail: don.leftwich@oc.e

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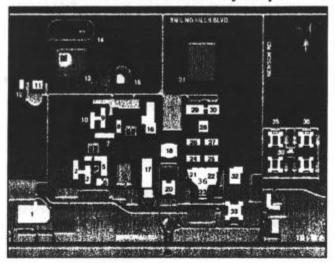
Oklahoma City, OK 73136-1100

PLEASE POST

Early or Absentee Registration Form Oklahoma-Arkansas Section Meeting Oklahoma Christian University March 30-31, 2001

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fall names registered or use multiple forms.) Home Address: (Optional)	Fax:	Company Representative Retired Other		\$8.00 =	Total Payment =ease make check payable to MAA)	e OK-AR Section History.	Don Leftwich Mathematics Department Oklahoma Christian University Box 11000 Oklahoma City, OK 73136-1100 Fax: 405-425-5446
(If more than one name, please provide a list of all names registered or use multiple forms.) S: (Optional)	Phone:	aculty Member [] bepartment Chair [] tudent	Registration (Indicate quantities for all that apply):	Regular Registration(s) @ \$10.00 = Student Registration(s) @ \$2.00 = Voluntary Registration(s)* @ \$25.00 = Faculty Workshop (Free) Student Workshop (Free) Chairs/Heads/Liaisons Lunch @ \$8.00 = Faculty Sponsor of Student Chapter @ \$8.00 = Faculty Sponsor of Student Chapter @ \$15.00	Method of Payment (no P.O. please) [] Cash [] Check (Please make check payable to MAA)	*Voluntary Registration (\$25) includes a copy of the OK-AR Section History.	Please mail to be received by March 26, 2001 to:
School Address: or Company	e-mail:	Status: (Check one) [] F [] D [] S	Registration (Indica	Regul Stude Stude Volur Facul Facul Chair Facul Banqu	Method of Payment [] Cash	*Voluntary Registra	Please mail to be rec

Oklahoma Christian University Campus



- 17. Gaylord University Center, Snack Bar, and Dining Rooms
- 28. Reba Davisson American Heritage Building DAH
- 29. Prince Engineering Center PEC (Registration)
- 30. Herold Science Hall HSH
- McIntosh Conservatory/Recital Hall & Art Gallery
 Visitors may park in any lot on campus.



Regional Map (and points of interest)

- 1. Oklahoma Christian University
- 2. Quail Springs Mall
- 5. Penn Square Mall
- 6. National Cowboy Hall of Fame
- OKC Zoo, Kirkpatrick Science & Air Space Museum
- Myriad Botanical Gardens, OKC Bombing Memorial
- 11. Bricktown

SPRING MEETING WORKSHOPS 11:30 Friday, March 30

Faculty Workshop: Jeff Knisely, East Tennessee State

University

Topic: Successful Grant Writing

Abstract: The workshop will focus on exposing the participants to a number of different funding programs as well as examining the process used by NSF to review and find grant proposals. There will also be discussion about how one transforms a good idea into a grant proposal requesting support for the idea.

Student Workshop: Matt Miller, KAMC and KLBK television in Lubbock, TX.

Topic: Mathematics Breathes Life to the Field of Meteorology Abstract: In this workshop, Matt will look into the exciting world of weather, the business of meteorology, and how this science is closely tied to mathematics. He will delve into weather forecasting with a hands-on, computer driven approach. Starting with seven equations and seven unknowns, one can completely explain the physics of the atmosphere. However, the problem occurs because of an overabundance of data and the inability to gather data. To alleviate this problem, meteorologists rely on estimation techniques from applied mathematics.

MINUTES FOR THE BUSINESS MEETING OKLAHOMA-ARKANSAS SECTION MAA April 1, 2000 Arkansas Tech University

The meeting was called to order by Chair, V. Lee Turner,
Southern Nazarene University, at 9:45 a. m. on Saturday morning
April 1, 2000. There were approximately 40 members present.
The minutes of the business meeting for 1999 were approved.

Secretary-Treasurer, Robert McMillan, Oklahoma Christian

University, gave the treasurer's report covering the period from 3/17/99 to 3/18/00. He gave an up-to-date report of assets. They are:

Operational Account	\$5,951.46
N. A. Court Lecture Fund	\$4,702.55
CD@5.32% APY, (Maturity 2/01)	\$12,462.06
Faculty Workshop Savings	\$2,269.52
Student Workshop Savings	\$623.10
Total:	\$26,008.69

The Treasurer's Report shows an increase of \$659.74 from last year's report. This is after expenses for last year's meeting, expenses up to 3/18/00, and receipts and interest added in up to 3/18/00 for all accounts. Several expenses did not show up on this report such as printing and newsletter expenses because the Section had not been billed as of the above date. With those expenses added we would have shown a decrease in total assets. Expenses for last year totaled \$2,771.11. The Treasurer's Report was approved.

The Governor of our Section, John Watson, Arkansas Tech University, delivered his first report as our new governor. He attended both meetings of the governors. One in Providence RI during August 1999 and the other in Washington DC in January 2000. At the August meeting he reports the following:

- Approval of Dr. Tina Straley to replace Marcia Sward as Executive Director of the MAA.
- Financial status of MAA is good; \$374,455 surplus in 1998 fund.
- Concern about decreasing membership; however the board of governors passed a budget for 2000 which included a dues increase of 4%.
- Lengthy discussion about the MAA mission statement; no changes made; "to advance the mathematical sciences, especially at the collegiate level".

- Approved the concept of SIGMAA special interest groups in the MAA; during the fall the first SIGMAA was organized – ARUME – Association for Research in Undergraduate Mathematics".
- Approval of Stanley Eliason, University of Oklahoma, for the OK-AR Section meritorious service award.

The following was reported at the January meeting:

- He did not receive an agenda since there were not enough to go around. He has requested a copy but has not received it at this point.
- A 4% dues increase for 2001, but you can anticipate a
 restructuring of the dues matrix. You may have seen an email
 from a committee studying dues and the decline in
 membership. He encouraged members to respond or pass any
 ideas on to him.
- The 2000 MAA budget: \$4.7 million balanced.
- Got a preview of the web site dedicated to math awareness; check this out on the display on this floor.
- Encourage people to go to Mathfest this summer at UCLA, August 3-5; AMS meeting "Mathematical Challenges of the 21st Century" follow August 6 – 12, also at UCLA.

David Bridge, University of Central Oklahoma, gave the Chairs/Liaisons Report. There were approximately 35 members present at the luncheon, March 31, 2000. This meeting has over the preceding years given many benefits to the Oklahoma-Arkansas Section. This year the following recommendations were made.

 Support was shown for Section NExT. This stands for New Experiences in Teaching and is designed for beginning college and university math teachers. The MAA had supported this project for several years now and the idea of moving it to the sections is proposed. A person is needed to coordinate activities for the section. No action was taken.

- 2. A proposal to drop the OK-AR High School Lecture Program. This program in the last few years has been viewed as a good idea that just didn't work. Other ideas were suggested to replace this program. One was for individual departments and/or faculty to encourage contact between high school teachers/students and university teachers through student teachers, workshops, and state math meetings. It was also suggested that the Public Information Officer for the OK-AR Section could have some good input in this area. David Boliver, University of Central Oklahoma, agreed to work as PIF in the coming year
- 3. Robert McMillan, the current treasurer, suggested a need for a review of how funds are disbursed in the section. He pointed out that no one currently checks on the funds except by way of the treasurer's report in the business meeting. With the growth of the funds in recent years we need a system of checks and balances to make sure funds are being disbursed in a correct and rightful manner as well as protecting the ones responsible for the funds. The matter was referred to the Executive Committee. Action is to be taken and recommendations to be made at next year's meeting.

Mike Keisler, Arkansas Tech University, gave the Faculty Workshop report. He reported we had 28-faculty register for the workshop. Darrel H. Abney from Maysville Community College presented the workshop on, "Calculator CAS (Computer Algebra Systems) from the Ground Floor Up". It was well received by those attending and many useful ideas were presented.

Steve Hennigan, Quachita Baptist University, gave the Student Workshop report. He reported we had 13-students register for the workshop. Colm K. Mulcahy from Spelman College presented the workshop on, "The Curves and Surfaces of the Digital Age". The students even though they were few in numbers took home many good ideas.

Cassandra Cox, University of Arkansas at Little Rock, gave the student chapter coordinator report. There were nine people in attendance. They discussed how to get students involved with section activities. A chat room for students on the web page was suggested.

Andy Magid, University of Oklahoma, was elected to the N. A. Court Lecture Committee. The members of the 2000-01 committee are:

William Coberly, University of Tulsa, chair, William Feldman, University of Arkansas, 2-year member, Andy Magid, University of Oklahoma, 3-year member.

Allan Cochran, University of Arkansas, gave the report on the American High School Math Exams (AHSME) for Arkansas. He handed out a written report. There were 64 high schools participating this year with about 2900 students. This was the first year the test had two different categories, grades 10 and under and grades 11 and 12. Appreciation was extended to Allan for his work in this area.

Dennis Bertholf, Oklahoma State University, gave the report on the AHSME exam for Oklahoma. He also handed out a written report. There were 37 schools participating this year with over 1700 students. Appreciation was extended to Dennis for his work in this area.

Ken Harrelson, Westark College, gave the Newsletter report. He mailed out 525 copies at a cost of \$593.05. He encouraged faculty to get information to him. This year the newsletter had six ads from McGraw-Hill, Houghton-Mifflin, Oklahoma State University, The University of Oklahoma, The University of Tulsa, and The University of Arkansas. These ads contribute \$600 towards the cost of the newsletter. It is the first time in our history that the Newsletter has made money for the Section. Ken receives our accolades.

David Boliver gave the Oklahoma Mathematics Awareness Report. He stated that we are all in the public relations business as far as mathematics is concerned. He encouraged all of us to promote mathematics in every way we can. He gave examples of newspaper articles such as Oklahoma State's program in algebra, Northeastern Oklahoma State's mathematics Ice Cream Social, and the L. Wayne Johnson's Lecture at the University of Central Oklahoma. He thought it would be helpful to have the MAA material about mathematics awareness about a month earlier than we presently get it.

Donna Foss, University of Central Arkansas, gave the Arkansas Mathematics Awareness Report for Linda Griffith. She said that Linda was working on a brochure for the High Lecture Program for Arkansas.

The Distinguished Teacher Award for the Oklahoma-Arkansas Section for 2000 was presented at the Banquet to John Watson, Arkansas Tech University. William Durand, Henderson State University, presented the award. The other members of the selection committee were Douglas Aichele, chair, Oklahoma State University, Walter Kelley, University of Oklahoma, Allan Cochran, University of Arkansas, and Jim Yates, University of Central Oklahoma.

David Gardner, Henderson State University, gave the Arkansas Public School Awards report. He stated that there were 250 announcements sent out with 15 nominees for final selection. All of the nominees had excellent credentials for the three awards. The members of the selection committee consisted of Ed Mosley, Lyon College, John Watson, and chair David Gardner. The awards were presented at the Banquet with all Awardees present. They are as follows:

- Rhonda Shannon, Valley View High School, Jonesboro Public Schools, High School Teacher of the Year, 1999-2000;
- Beth Maurer, Southwest Middle School, Searcy Public Schools, Middle School Teacher of the Year, 1999-2000;
- Tracy Keifer, Euper Lane Elementary School, Fort Smith Public Schools, Elementary School Teacher of the Year, 1999-2000.

Sandra Johnson, University of Oklahoma, gave the Oklahoma Public School Awards report. She sent out 175 flyers to math department chairs across the state. She got 39 nominations with 15 finalists. The selection committee consisted of Gerard East, Southwestern Oklahoma State University, Nancy Warden, University of Science and Arts of Oklahoma, and chair Sandra Johnson. The awards were presented at the Banquet with all Awardees present. They are as follows:

- Alice Ward-Franey, Jenks High School, Jenks Public Schools, High School Teacher of the Year for 1999-2000;
- Marilyn Howard, The University of Tulsa University School, Tulsa, Oklahoma. Middle School Teacher of the Year for 1999-2000:
- Ellen C. Bones, Roosevelt Elementary School, Norman Public Schools, Elementary Teacher of the Year for 1999-2000.

David Boliver and Carolyn Eoff, Henderson State
University, gave the Department Liaisons Coordinators Report.
They expressed appreciation for those serving in this important communication tool. They would like to have liaisons from each college/university in their respective states. Appreciation was also extended to them for serving in this capacity.

Meeting sites and dates for future meetings of the Section were approved. Sites for 2002 and 2003 were selected. The Site Selection Committee consisted of *Darryl Linde*, Northeastern Oklahoma State University, and *Charles Seifert*, University of Central Arkansas. They recommended Henderson State University for 2002 and The University of Tulsa for 2003. Members approved these sites and dates.

2001 Oklahoma Christian University March 30-31, 2001, Oklahoma City, OK Contact: Don Leftwich

e-mail: don.leftwich@oc.edu

2002 Henderson State University April 5-6th, 2002, Arkadelphia, AR

Contact: Debra Coventry e-mail: coventd@hsu.edu

2003 The University of Tulsa March 28-29, 2003, Tulsa, OK Contact: William Coberly e-mail: coberly@utulsa.edu

The following officers were elected:

Past-Chair: V. Lee Turner, Southern Nazarene University
Chair: Don Carnahan, Arkansas Tech University
1st Vice-Chair: Don Leftwich, Oklahoma Christian University
2nd Vice-Chair: Debra Coventry, Henderson State University
Secretary-Treasurer: Robert McMillan, Oklahoma Christian
University

The Chair asked if there was any new business.

- Following the recommendation of the Chairs/Liaisons
 Committee a motion was made to develop a plan for an audit
 or review of funds. The Executive Committee is to study this
 matter and come up with a plan to be presented next year. The
 motion passed.
- The chair announced the appointment of a Search Committee
 for a new secretary-treasurer of the section. Stan Eliason is to
 chair this committee with other members being Ray Hamlett,
 Southeastern Oklahoma State University, David Bridge,
 William Feldman, University of Arkansas, Calvin Piston,
 John Brown University, and William Durand.
- In connection with the selection of a new secretary-treasurer the Executive Committee recommended looking into the possibility of dividing up some of the duties of the secretary-

treasurer. Robert McMillan stated that a good division of duties might be one where we have a program director (That is, a person responsible for all the details of the program, coordination, abstracts, printing, etc.) and keep the other duties intact. Division of the secretarial duties from the treasurer's duties was not thought to be a good idea. A motion was made and passed that the Search Committee above also considers the division of duties. It could be that no division is considered necessary depending on the recommendation of this committee.

- 4. A new Putnam Plaque was started this year, as the first one was full of names. A decision needed to be made about what to do with the old plaque. A motion was made and passed that we keep the two plaques together. Robert McMillan is going to check to see if it is possible to join the two plaques.
- A question was asked about guidelines for the school awards.
 There isn't a clear set of guidelines used by both states. The chairs of the award committees, Sandra Johnson and David Gardner, agreed to draw up a set of common guidelines and report back next year.

Eileen Hargrove, Oklahoma Baptist University, gave the resolutions committee report:

Be it resolved that the Oklahoma-Arkansas Section of the MAA expresses its thanks to the faculty, staff and administration of Arkansas Tech University for their courteous hospitality in hosting the 62nd annual meeting of the association. Special thanks go to *Don Carnahan* and our banquet chef.

Be it resolved that the Section expresses its appreciation to John Watson for his outstanding service in representing the Section as its Governor for the past year. Thanks also to Section officers, Chair, V. Lee Turner, 1st Vice-Chair, Don Carnahan, and Robert McMillan, Secretary-Treasurer of the Section for carrying out the mission of the Section during 1999-2000.

Be it resolved that the Section expresses its gratitude to

Colm K. Mulcahy of Spelman College for presenting the interesting and stimulating student workshop on "Curves and Surfaces of the Digital Age". Additional appreciation is extended to the Student Workshop Committee for organizing the workshop.

Be it resolved that the Section expresses its gratitude to the Faculty Workshop Committee for organizing the workshop on "Calculator CAS from the Ground Floor Up" and to Darrel H. Abney of Maysville Community College for his excellent presentation in the workshop.

Be it resolved that the Section conveys its sincere appreciation to our invited speaker Paul Zorn, for his colorful and stimulating presentation on "Math Mag Morsels" and to Michael Aschbacher for his beautiful and inspiring N. A. Court Lecture titled "Finite Simple Groups".

Be it resolved that the Section expresses thanks to David Boliver and Linda Griffith for coordinating math awareness in both states, and to Allan Cochran and Dennis Bertholf for administering the AHSME exams in Arkansas and Oklahoma. Thanks also to Newsletter editor Ken Harrelson for his service to the Section.

Be it resolved that the Section expresses its sincere thanks to the Teacher Award Committees for their selection of outstanding mathematics teachers for the Section to honor. Appreciation is also extended to Department Liaison Coordinators, *David Boliver* and *Carolyn Eoff*, for their help in strengthening lines of communication within the Section.

Be it resolved that the Section expresses thanks to everyone who served the Section on a committee or participated in planning the Annual Meeting.

John Watson gave a summary report on the meeting. There were 155 registered for the meeting, with 5 vendors, and 164 attending the banquet. A drawing was held for two calculators furnished by Texas Instruments. The winners were Donna Farrior and Edith Stillsmoking.

The meeting adjourned at 11:05 a.m.

University of Arkansas

Location • The University of Arkansas is located in the city of Fayetteville, nestled in the beautiful Ozark Mountains of Northwest Arkansas. With a population of over 50,000, Fayetteville combines bigcity culture with a small-town atmosphere. Thousands of acres of nearby state parks and numerous clear rivers and lakes provide many options for outdoor recreation. The historic U of A campus has a diverse student body and offers extensive opportunities for both social and academic life. There is something for everyone at the University of Arkansas.

The Department of Mathematical Sciences • The two dozen regular faculty members are committed to quality instruction at all levels and are actively engaged in several scholarly research areas, including algebra, analysis, geometry, and statistics. Graduate students may choose from programs leading to an M.A. in secondary Mathematics, an M.S. in Statistics, Computational or Pure Mathematics, or a Ph.D. in Mathematics.

Financial Aid • Graduate Teaching Assistantships are available to qualified applicants in Mathematics and/or Statistics. Teaching assistants receive a stipend of \$9300 per academic year, in addition to a tuition waiver. Responsibilities include teaching, grading, and tutoring in the popular Math Resource Tutoring Center. Students interested in applying for teaching assistantships should submit all application material by April 1 for the following academic year.



For more information contact: Director of Graduate Studies Department of Mathematical Sciences and Engineering 301 University of Arkansas Fayetteville, Arkansas 72701

Website: http://www.uark.edu/math e-mail: gradmath@comp.uark.edu

phone: (501) 575-3351 FAX: (501) 575-8630

Oklahoma State University

Assistantships and Fellowships

The Department of Mathematics at Oklahoma State University invites qualified applicants to join its Graduate Program. We are a small (30 faculty, 45 graduate students) but very active and friendly department located in the safe and affordable city of Stillwater.

GRADUATE PROGRAM

We offer both a Masters Program (Pure and Applied Mathematics) and a Doctoral Program (Pure Mathematics and Mathematics Education). Applicants are accepted into the appropriate programs depending on their career choices and their mathematical background.

GRADUATE FACULTY

Our faculty research efforts are focused in several areas: Algebraic Geometry, Analysis, Mathematics Education, Number Theory, Representation Theory and Topology. We have strong groups in each of these subdisciplines and conduct weekly seminars in each area.

FINANCIAL AID

Teaching Assistantships provide most of our financial aid to graduate students. Most students do not teach in their first year. Instead, first year students are provided courses to enhance their teaching skills. Salaries are competitive and duties in subsequent years include teaching 5-6 hours per week. All teaching assistants receive waivers of out-of-state tuition. Outstanding applicants are granted full tuition waivers.

Fellowships are available on a highly competitive basis and are usually restricted to those interested in pursuing a doctoral degree. Advanced doctoral students may also be supported by Research Assistantships, with reduced teaching assignments while doing their thesis research.

ADDITIONAL INFORMATION

Application forms and more information may be obtained by writing to:

Director of Graduate Studies Department of Mathematics Oklahoma State University 401 Mathematical Sciences

Stillwater, OK 74078-0613

email: graddir@math.okstate.edu website: www.math.okstae.edu

phone: (405) 744-5688 FAX: (405) 744-8275

The University of Oklahoma Graduate Studies in Mathematics

The Department has an active research faculty, with special strengths in Algebra, Applied Mathematics, Differential Equations and Control Theory, Geometry and Topology. There are approximately 30 graduate students, most of who work as graduate assistants. The Department's Karcher endowment supports a variety of visiting speakers throughout the academic year.

Pure Mathematics. The Department offers both the M.A. and Ph.D. degrees, with a variety of options for research specialization. Most graduates pursue careers in university teaching or research, or teaching in 4-year colleges.

Applied Mathematics. The Department offers both the M.S. and Ph.D. degrees, allowing the student to specialize in any of a broad range of applications, such as applied differential equations and applied algebra. Most graduates pursue careers in teaching or in industry.

Mathematics Education. The Department offers a special option within the Ph.D. program to train students for research in undergraduate mathematics curriculum and pedagogy. Most graduates pursue careers in university teaching or research.

Location. The University is located in Norman, a comfortable city of 80,000, approximately a half-hour drive from downtown Oklahoma City.

Financial Aid. The Department offers graduate teaching assistantships, research assistantships, and fee waivers on a competitive basis.

For Information Please Write To:

Director of Graduate Studies Department of Mathematics The University of Oklahoma 601 Elm Avenue, PHSC 423 Norman, Oklahoma 73019 Website: www.math.ou.edu

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