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The Newsletter is published in April and November each year. The deadlines for items to be included in each issue are March 15 and October 15 respectively. Departmental News appears in the November newsletter only and is solicited from department liaisons. Full page ads are available for graduate programs and for corporate ads. Quarter page ads are available for position advertisements. Contact the advertising manager for details.

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Advertising Manager: Same as editor.

July 31-Aug. 2, 2003	MathFest, Boulder, CO	
November 13-16, 2003	AMATYC Annual Meeting, Salt Lake City, UT	
January 7-10, 2004	MAA/AMS Annual Meeting, Phoenix, AZ	
March 26-27, 2004*	Southeastern Section MAA, Clarksville, TN	
April 21-24, 2004	NCTM Annual Meeting, Philadelphia, PA	
August 12-14, 2004	MathFest, Providence, RI	
November 18-21, 2004	AMATYC Annual Meeting, Orlando, FL	
January 5-8, 2005	MAA/AMS Annual Meeting, Atlanta, GA	
March 11-12, 2005	Southeastern Section MAA, Raleigh, NC	
April 6-9, 2005	NCTM Annual Meeting, Anaheim, CA	
August 4-6, 2005	MathFest: Albuquerque, NM	
November 10-13, 2005	AMATYC Annual Meeting, San Diego, CA	
January 12-15, 2006	MAA/AMS Annual Meeting, San Antonio, TX	
April 26-29, 2006	NCTM Annual Meeting, Kansas City, MO	
November 2-5, 2006	AMATYC Annual Meeting, Cincinnati, OH	
March 21-24, 2007	NCTM Annual Meeting, Atlanta, GA	
November 15-18, 2007	AMATYC Annual Meeting, New Orleans, LA	
April 9-12, 2008	NCTM Annual Meeting, Salt Lake City, UT	

*The 2004 Meeting at Austin Peay State University will be on March 26-27, 2004. This is a change from previously announced dates, please update your calendar.



From the Chair

It is a great privilege, and a bit daunting, to take on the title of Section Chair on the heels of Ray Collings, his predecessor Bob Fray, and those that came before. We have all been energized by Ray's good cheer and tireless dedication to the section, and I look forward to his continued advice and help.

We are coming off of another great spring meeting, this year held jointly with the SIAM Southeastern-Atlantic Section and hosted by Clemson University. We may have had an all time high in student participation, including teams from twelve schools competing in "Math Jeopardy" as well as many fine student talks and posters. Thank you to Mike Berry and Yiheng Yang of SIAM and UT-Knoxville for organizing Math Jeopardy --- it was great fun for audience and participants, and I hope that we can find a way to revive it at our future meetings. Congratulations to the "final four" teams from the Citadel, Coastal Carolina University, the College of Charleston, and Furman University (a South Carolina sweep!). Thank you also to SIAM-SEAS President Jackie Huband and our local organizers, headed by Mark Cawood and Chris Cox, for importing the SIAM-SEAS tradition of judging student presentations at our meeting, complete with cash awards for the top talks and top posters presented by undergraduate and graduate students to complement the MAA membership or book for all student presenters that is our tradition. Other meeting highlights included a record-sized TA Rush with tables from NSA, AWM, and SIAM, in addition to a dozen graduate schools, overflowing into two rooms, six short courses, a jam-packed schedule of 150 talks lasting into the mid-afternoon on Saturday, and four superb plenary talks by Margaret Wright of the Courant Institute, Section Lecturer John Baxley, our 2002 Teaching Award recipient, Ronald Harshbarger, and MAA President Ron Graham. In addition to the regular contributed paper sessions, we had six special sessions organized on three topics and two sessions for commercial presentations. The Friday night social event (barbecue dinner) included "Celebrity Jeopardy" for entertainment, emceed by our Governor, Theresa Early, and featuring a motley panel of current and past section officers. The exhibitors provided ample sustenance to keep us going during the day, including a continental breakfast on Saturday morning. Finally, we were pleased to honor Sue Goodman of UNC-Chapel Hill with the Southeastern Section Award for Distinguished College or University Teaching of Mathematics, and Sylvia Bozeman of Spelman College with our Distinguished Service Award. Look for their citations in this newsletter.

The meeting was the culmination of two years of planning and hard work by our Clemson hosts and by the Executive Committee, particularly Program Chair Joe Wimbish, and their efforts rewarded all of us with a fantastic event.

(Continued on page 8)

LOOKING FOR A GREAT MATHEMATICS SPEAKER?

Invite a Southeastern Section Lecturer to your campus!

Many think the Section Lecturer only delivers an address at the Annual Meeting of the Section, but this person also visits individual institutions within the Section.

Jeff Knisley of East Tennessee State University is the 2003-2004 Section Lecturer. He is available for the next two academic years. Contact him at knisleyj@etsu.edu. Possible talks include:

- Mathematical Biology: The Grand Tour (E*)
- Some Applications of Mathematics in Medicine (E)
- From Neurons to Neural Networks (I)
- Maybe the Best Curve Fitting Algorithm Ever! (I)
- The Mathematics of Cable Networks (I, A)
- Mathematical Models of the Neuron (A)
- A New Old Approach to Nonlinear Dynamical Systems (A)

John Baxley of Wake Forest University was the 2002-2003 Section Lecturer. He is still available for the 2003-2004 academic year. Contact him at baxley@mthcsc.wfu.edu.

*E is for Elementary: intended for college students who are interested in mathematics, and for educated laymen in the general public. No college level training in mathematics is assumed.

I is for Intermediate: intended for students who have completed a year of calculus or other mathematics at a similar level.

A is for Advanced: intended for junior and senior mathematics majors.

Make your arrangements today!



From the Governor

The Board of Governors of the MAA met on January 14, 2003 in Baltimore immediately before the AMS-MAA Joint Mathematics Meeting. Current MAA president, Ann Watkins, chaired her last Board of Governors meeting. The next Board meeting will be held just before MathFest and will be chaired by our in-coming president Ron Graham. The January

meeting was also the last Board meeting for David Stone, who has served for many years on the Board as a Governor from our Section and as Chair of the Committee on Sections. We certainly appreciate all David has done on the Board. But while we lost David's representation on the Board, two other current or former members of our section were elected to serve on the Board. Dan Teague of the NC School of Science and Mathematics was elected as Governor-at –Large for High Schools and Carl Pomerance, formerly of the University of Georgia, was elected as Governor-at-Large for Mathematicians Outside Academia. We are excited about their service on the Board.

A new election process was approved at the January meeting. Members will receive paper ballots with the option to return the ballot by mail or vote online. This new process is intended to encourage more participation in the election as well as reduce paper work. I encourage you to vote in the upcoming national MAA election.

Lowell Beineke was approved as the new editor of the *College Mathematics Journal*, and Arthur Benjamin and Jennifer Quinn were approved as the new editors of *Math Horizons*. By the way, the May issue of *College Mathematics Journal*, Woody Dudley's last issue, is rumored to be a very special issue. Be sure to look for it!

The MAA is very excited about the generous gift of \$3,000,000 from Paul and Virginia Halmos for renovation of the carriage house, part of the MAA properties in Washington, DC. The facility will be used to create an MAA Mathematics Conference Center.

A practical item of interest I learned about at this past Board meeting was that any individual member who because of age is no longer in active service, who is in good standing at the time of retirement, and who has been a member of the Association for at least twenty years, may upon notifying the central office of your retirement, be exempt from the payment of dues, while retaining all of the privileges of membership except receipt of journals. You will continue to receive the *Focus*. This is a good way for those of you embarking on retirement to keep up on what is going on in the MAA.

(Continued on page 8)



MAA Southeastern Section Newsletter Spring Executive Committee Meeting

The spring meeting of the Southeastern Section Executive Committee was held Thursday evening, March 20, 2003 at the Ramada Inn following a reception and dinner. The meeting opened with the report from the Site Selection Committee Chair, David Royster. The committee had narrowed the

choices of a possible site in North Carolina to three, and the Executive Committee used the input provided by the committee to recommend that the 2005 Annual Meeting be held at Meredith College in Raleigh, NC, March 11-12, 2005. The Executive Committee then had an overview of this year's meeting at Clemson University led by Mark Cawood, Chris Cox, and Terri Johnson, the local hosts. Mutual appreciation was expressed for the hard work and cooperation that took place in organizing this joint meeting of our Section and the Southeastern Atlantic Section of the Society of Industrial and Applied Mathematics (SIAM-SEAS).

Chair-Elect Stephen Davis reported on the Section Officers Meeting at the January Joint Meetings in Baltimore. He mentioned a short course that is being offered by the MAA National Office that we should consider for next year's meeting. MAA is also considering a Project NeXT type project for two-year institutions. It was also discussed how some sections recognize students in the region who are top scorers on the AMC-12 exam. Vice-Chair Patty Monroe reported that she has worked to publicize the Clemson meeting to faculty at two-year institutions. In addition, she sent announcements to high school teachers in South Carolina. She also worked with the Nominations Committee to find her replacement, her term is ending at this meeting. Secretary/Treasurer Martha Abell reported on the financial situation of the Section. She also thanked former Secretary/Treasurer Stephen Davis for all of his assistance throughout the year.

Governor Theresa Early brought up an issue concerning the election taking place to find her replacement. There was much concern that many Section members had not received ballots. She was going to contact Tina Straley, the Executive Director of MAA to check on the situation. Theresa also suggested that we make a concerted effort to work with SIGMAA's to have special sessions in their areas at our Section meetings.

Newsletter Editor Virginia Watson reported that the cost of the newsletter has gone down this year. In the Spring 2003 Newsletter, she plans to have more pictures from the Section meeting. Virginia pointed out that the pull out section using colored paper increases the expense of the Fall Newsletter. However, it was decided to continue this practice in spite of the cost to bring

attention to the Section Meeting information. She also asked the committee members for help in finding an Advertising Manager to assist her with ads for the newsletters. This person solicits ads, collects money, and makes sure that the Editor receives them in time for publication. This person would explore corporate ads in addition to the graduate schools that typically buy ads.

Historian Joe Albree reported on his new plan to write the history of the Section. Because there appears to be gaps in the recorded records of the Section, he plans to produce a gallery of pioneers of the section. To illustrate what he plans to compose, he submitted draft copies of articles on Ruth Wycliffe Stokes (who took a leading role in re-establishing the Southeastern Section of the MAA and was elected Chair of the Section in 1947) and Henry Allen Robinson (who served as Secretary/Treasurer of the Section from 1933 to 1959). He also plans to interview some of our veteran Section Members.

Chair Ray Collings asked that the Executive Committee work harder to encourage colleagues to nominate candidates for the Section Service Award. It was also suggested that information be placed on the website. The Section continues to try to update the e-mail addresses of our members. This year, we had members include an e-mail address on the registration form for the meeting. State Directors can assist in this process by making sure that liaisons addresses are correct.

The Executive Committee then heard reports from the State Directors concerning the state dinners and other issues related to their posts.

Ray Collings gave the report from the Teaching Award Committee and pointed out that Ted Shifrin will be at the Section meeting to present the Teaching Award. Johnny Henderson will remain on the Teaching Award Committee although he moved to an institution outside of the Section. He will not serve as chair of the committee, however. He also reported from the Service Award Committee that he will serve with a subgroup of the Service Award Committee to select the Section Nominee for the National Service Award (as it is our year to make a nomination). Several members of the current Service Award Committee will be eligible for the award, so Ray and Marcellus Waddill will serve on the committee in their places.

Theresa Early reported for the Nominations Committee. The slate of officers is found in the report from the Business Meeting.

The Executive Committee voted to recommend to the Site Selection Committee that the Section plan to meet with SIAM-SEAS at least once every four years. The Committee also voted to recommend that the two short courses being promoted by the national MAA Office (the Arizona Course and the Assessment Course) be offered at the 2004 Meeting. **Martha Abell**

(Continued from page 3)

Mark your calendars for our spring meetings on March 26-27, 2004 (note this is a change from the original dates), at Austin Peay State University, and March 11-12, 2005, at Meredith College. Jim Vandergriff and his colleagues at APSU are already busy planning to host us next year. You can help that process by forwarding ideas for special sessions and for short courses to Joe Wimbish and/or to me.

The spring meeting is the high point of the Section' s annual calendar, but there are also many other activities sponsored by the Section and by our member institutions. I just returned from the 2nd annual Parsons Lecture at UNC-Asheville, where we were treated to a great talk by Bill Dunham on the rivalry between Newton and Leibniz. Like UNC-A, many of the institutions in our Section sponsor annual lectures and other colloquia of interest beyond their campuses. Also, each state in the Section sponsors an annual state dinner--- read about these in the State Directors columns later in this newsletter. These are all great opportunities to renew connections with your extended MAA family and to introduce our students to a broader world of exciting mathematics and mathematicians.

I may see some of you at the AP Calculus Reading in June, or at MathFest at the end of July (or maybe perhaps at my daughter's wedding in August). Whether or not we have the chance to meet, I wish everyone a great summer and an even better fall.

Stephen Davis

(Continued from page 5)

I encourage you to participate in the many funded projects of the MAA. The PREP Workshops for 2003 look very interesting. The MAA also has received funding for PMET, a program for preparing mathematicians to educate teachers, and anticipates funding for a National Research Experience for Undergraduates Program, which focuses on summer research activities for underrepresented students. Check the MAA web page for details about these and other projects of the MAA.

This will be my last column as Governor. After six years as Newsletter Editor three years as Governor, it will be strange – but pleasant - not to have to worry about deadlines for the Newsletter. But I plan to stay active in the Section since I would miss very much working closely with the people of the Section. Thanks to all of you who helped me with either of my jobs. You are a great group of people!

Theresa Early

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The University of South Florida is a large and diverse community with the main campus on 1,748 acres located on the outskirts of Tampa. The warm sunny climate allows outdoor activities throughout the year. Tampa Bay is a resort area offering numerous recreational and cultural attractions.

For more information: **visit**: www.math.usf.edu, **call**: 813-974-9566 or 813-974-5329, **e-mail**: ga@math.usf.edu, **write**: Graduate Admissions Director, Department of Mathematics, University of South Florida, PHY114, Tampa FL 33620-5700.

Announcements

Advertising Manager Sought

The MAA Southeastern Section Newsletter is looking for an advertising manager. This person solicits advertisements, collects money, and ensures that the Editor receives the ads in time for publication. The new advertising manager will help generate new sources of revenue for the MAA by developing corporate advertisements. Email Virginia Watson at vwatson@kennesaw.edu if interested.

Contribute to MAA-SE Student Activities

The Southeastern Section supports student activities at its annual meeting through:

- TA Rush and a student pizza lunch
- Undergraduate Student Poster Sessions
- Undergraduate Student Contributed Paper Sessions
- Reduced student registration fees

Further, student participation in the Association is encouraged by the State Directors through their organization of state dinners and coordination with MAA Student Chapters.

The Executive Committee of the Southeastern Section invites you to help sponsor these activities through a donation of \$10 or more. Make your contribution by sending a check (payable to MAA-SE) to

Martha Abell, Secretary-Treasurer MAA Southeastern Section Georgia Southern University P O Box 8130 Statesboro, GA 30460

Subscribe to Section Listserve

An e-mail listserve has been established for news of the section; subscribe by sending the message

subscribe sesmaa Your Name

(where "Your Name" is your real name; your e-mail address is obtained from the header of your message) to listserv@huntingdon.edu You may also use the subscription form located on the section website at http:// www.huntingdon.edu/MAA/.

MAA PREP Workshops

The MAA' s Professional Enhancement Program (PREP) will offer a wide variety of workshops during summer 2003. PREP workshops offer you the chance to spend a few days exploring topics of mutual interest with colleagues from other institutions, with experienced leaders to guide the group towards a deeper understanding and broader perspective. Most of the cost of attending a PREP workshop is covered by the program, so what are you waiting for? Visit the PREP web site, <u>http://www.maa.org/prep</u> to see this year' s schedule and to obtain registration materials.

A Tour of Combinatorial Games

Elwyn Berlekamp will be presenting the North Central Section of the MAA Summer Seminar, August 4-8, 2003. *Combinatorial game theory* is a rich and approachable unified theory used to analyze positions in games such as Chess and Dots&Boxes, bridging recreational and abstract mathematics, bringing fun to fundamentals. This week long seminar will be a hands-on investigation of *(Continued on page 12)*



12 MAA Southeastern Section Newsletter combinatorial game theory aimed at faculty from all fields of mathematics. Activities will include lectures, problem solving sessions, open problem investigations, tournaments, and computer exercises. For more information visit http://www.gustavus.edu/~wolfe/games2003.

Section Putnam Award

Each year the Section awards a \$100 prize to the individual from an institution in the Section who scores highest on the annual William Lowell Putnam Mathematical Competition. This year, the winner of the Putnam Prize for highest score at an institution in our region is Melanie E. Wood from Duke University. She is only the second woman in the history of the Competition to place among the top five.



*This is a change from previously announced dates, please update your calendar.

Sylvia Trimble Bozeman Receives Section Distinguished Service Award



Hugh Haynesworth, chair of the Southeastern Section Service Award Committee, made the following remarks upon presenting the award at the March 21, 2003 Awards Presentation.

The Mathematical Association of America Southeastern Section Distinguished Service Award was created in 1989 by the membership of the Section. This award is presented by the section to a member of the Section who has made outstanding contributions at the Section level. It is my pleasure to announce that the recipient of the 2003 MAA Southeastern

Section Distinguished Service Award is Sylvia

Trimble Bozeman of Spelman College.

As a long-standing member of the section, Professor Bozeman's service has included a great variety of assignments, including serving as the Southeastern Section as our Governor, as a member of the Executive Committee and as a speaker at our meetings. In addition, while serving on many national boards and committees, Sylvia is an ambassador of the Section.

One colleague recalls. "My first memory of Sylvia is as an energetic and dynamic section lecturer. Her help in developing our written history was invaluable. And with Sylvia as our governor, we had the best representation possible in National MAA deliberations. Her reports back to the section faculty gave us many ideas for improvement on our own campuses."

Professor Bozeman has served as a role model to us all, by encouraging and assisting her students to become active participants in our section as mathematics students, as speakers at our section meetings and ultimately as mathematicians and mathematics educators. Anyone that has attended the Annual Southeastern Section MAA meetings over the past twenty years cannot help but envy the impressive quantity and quality of participation at our section meetings by the students of Spelman College.

Professor Bozeman earned her B.S. at Alabama A & M, her M. S. at Vanderbilt University and, in 1980, her Ph.D. at Emory University. She began teaching at Spelman College as an instructor in 1974, working her way through the ranks to full professor. Beginning in 1984, she served first as department chair, then as Director of the Center for Scientific Applications of Mathematics and finally as Associate Provost for Science and Mathematics from 1998 until 14 MAA Southeastern Section Newsletter 2002, when she returned to full-time teaching. And she is one of the few faculty who has had the opportunity to preside over her president, as she served on the Spelman College Board of Trustees from 1993 until 1999.

Over the course of her career, Syliva has served mathematics and mathematics education on more committees, boards and grants than time permits me to name. A few offices, committees and boards include:

- the MAA Board of Governors as Governor-at-large and SE Section Governor;
- the Mathematical Sciences Education Board of the National Research Council;
- the National Association of Mathematicians Executive Board;
- Vice President of the National Association of Mathematicians;
- the Council of the American Mathematical Society; and
- the Executive Council of the Association for Women in Mathematics.

Much of Professor Bozeman's grant activity is also service oriented, including:

- Co-Director of EDGE (Enhancing Diversity in Graduate Education), an NSF, NSA and Mellon Foundation funded bridge program for women in mathematics;
- Co-Director of the Spelman-Bryn Mawr Summer Mathematics Programs, an NSF funded program to encourage undergraduate women to pursue the study of mathematics;
- Project Director of Kellogg Foundation and Kodak Corporation grants to establish and operate the Center for Scientific Application of Mathematics to support faculty and student research and interdisciplinary development in science and mathematics; and
- Project Investigator of the NSF ADVANCE Leadership Award, to pursue research and writing on the results of the EDGE Program.

In 1995, the Southeastern Section awarded Sylvia with the Distinguished Teaching Award. However, we are not alone in recognizing her contributions. She has received a White House Initiative Faculty Award for Excellence in Science and Technology; the Spelman College Presidential Faculty Award for Distinguished Service; and the Pinnacle Leadership Award of the Fortitude Educational and Cultural Development Foundation.

Professor Sylvia Trimble Bozeman, we commend you for your outstanding record of service to your Section and we are grateful for your continuing efforts on behalf both the Southeastern Section of the MAA and the national

organization. It is an honor to add your name to the distinguished list of recipients of the Mathematical Association of America Southeastern Section's Distinguished Service Award in recognition of outstanding contributions to the section membership. Congratulations on this well-deserved recognition.

Dr. Bozeman was unable to attend the meeting to accept the award. The following is her response to Ray Collings.

April 1, 2003

Professor Ray Collings, Chair Southeastern Section, MAA Lawrenceville, GA

Dear Ray:

Last week I received the wonderful news that I have been awarded the Southeastern Section Service Award. The e-mail message from Hugh Haynsworth came as quite a surprise since I had not spoken to any of my Spelman colleagues who attended the section meeting. Please convey my sincere appreciation to the Executive Committee, the Selection Committee and all who were involved in my selection for this special honor. Hugh also sent me a copy of the citation which accompanied the award. I especially appreciate the exceptional care which was obviously taken to develop such a warm and generous citation. My only regret is that I was not there to accept the award and express my appreciation in person.

Many people have given service to make our section one of the best in the MAA. I watched the work of several during my time on the Executive Committee so I know that there are many members who deserve an award. That knowledge makes my selection even more significant. You have my pledge of continued support of the Southeastern Section.

Again, please accept my sincere thanks for this honor.

Sincerely,

Sylvia

Sylvia T. Bozeman, PhD. Spelman College Department of Mathematics Atlanta, GA

Editors note: The call for nominations for the Section Distinguished Service Award appears in the fall newsletter.

MAA Southeastern Section Newsletter Sue E. Goodman Recipient of Section **Distinguished College or University Teaching** Award



Theodore Shifrin, chair of the Section Teaching Award Committee, made the following remarks upon presenting the award at the March 21, 2003 Awards Presentation.

It is a great pleasure for me to present Sue E. Goodman with the SE MAA Distinguished College or University Teaching Award this year. Sue works in the field of dynamical systems and studies the topology and geometry of foliations,

having gotten her Ph.D. under Larry Conlon at St. Louis University in 1974. She went to UNC (Chapel Hill) as an Assistant Professor, and it did not take long for her to be recognized as an exceptional teacher. She received the Graduate Math Association Award for graduate teaching in 1978 and the UNC-CH Tanner Award for undergraduate teaching a few years later in 1981. In 1991-94 she held the post of Bowman Gordon Gray Professor in honor of her undergraduate teaching. Sue has also taken a lead in the involvement of the UNC Chapel Hill mathematics department in teacher training.

Sue brings to her teaching an unusual gift, a combination of an uncommon rapport with students, a knack for engaging students in a non-traditional classroom setting, and a flair for the geometric (including a growing use of technology in unusual ways). She has recently introduced two popular and successful freshman seminars, Symmetry and Tilings, and Fractals: The Geometry of Nature; Paul Sally is about to publish her text Beginning Topology in his new series for Wadsworth/Brooks Cole. Her department head points out that her teaching record at UNC is exceptional: in the wide variety of undergraduate and graduate courses she teaches, her student evaluations are "uniformly strong, even though she is a demanding teacher. Sue's natural aptitude for teaching, combined with her dedication and her caring attitude, make her a great teacher."

Let me give a few quotes from student letters which make the case that Sue is most deserving of the award this year. First, a student who's now a graduate student at Cornell working on her doctorate, almost surely because of Sue's influence:

"It was Sue's endless energy and enthusiasm that struck me when I first met

her as a sophomore in her course Introduction to Topology. Inspired by her teaching abilities, I enrolled in the first-year graduate course in Differential Geometry she was teaching the following semester, and can honestly say it has remained my favorite course in mathematics as an undergraduate. Aiming to give us a deeper understanding of the subject matter, she always put extra effort in[to] making her expositions clear, and provided us with very intuitive arguments. [**Personal injection**: As a differential geometer, I can vouch for the fact that this is difficult to do and is rarely done.] I came out of the course with a satisfaction that I had not experienced after my high-school years: I had a firm grasp of some of the most fundamental ideas in the class. ... [Sue] made mathematics human. Studying mathematics with her became a quest for beauty, full of passion and excitement. ...She deeply touched not only me, but also a number of her students."

From a doctoral student in computer graphics who daringly enrolled in Sue's course on dynamics, chaos, and fractals last spring:

"I was a little hesitant to enroll in an advanced math course for which I might not have the background, but after talking briefly with the instructor I decided to take the chance. That venture was richly rewarded: I learned a great deal from Dr. Goodman that semester, both about the course material and about teaching itself. ... Over the course of my doctoral work I had become accustomed to wading through the precise (if somewhat cryptic) description of a system first, then connecting all the equations with my observations of how the system actually behaved. This inductive approach serves me well in situations where I have some idea what to expect but leaves me bewildered when I study outside my own field. By contrast, Dr. Goodman's approach was one I have since come to use often: she began with the intuition and the rules of thumb, then added the formal equations that condensed the intuition into something precise."

I think we could all learn a lot about teaching from Sue. I look forward to seeing her topology text and to hearing her lecture at this time next year. It is indeed a great honor to present Sue E. Goodman with the 2003 SE MAA Distinguished College or University Teaching Award this year.

Editors note: The call for nominations for the Section Distinguished College or University Teaching Award appears on page 18.

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MAA Southeastern Section Newsletter

CALL FOR NOMINATIONS for the 2004 Award for Distinguished College or University Teaching of Mathematics

Nominations for the 2004 Southeastern Section Award for Distinguished College or University Teaching of Mathematics are now being accepted. The Southeastern Section selection committee will choose the winner of this award from the pool of nominees, and the winner will be honored at the Spring 2004 meeting of the Section at Austin Peay State University. The winner will also be widely recognized and acknowledged within the Section and will be the Section's official candidate for one of the three Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics that will be presented in January, 2004.

Nomination materials and a description of the complete nomination packet are included in this Newsletter. Each member of the Section is encouraged to consider submitting a nomination to Ted Shifrin, chair of the selection committee. If you wish to nominate someone, please submit a complete nomination packet by **October 31, 2003**.

Nomination packets for persons nominated for the 2003 award may be carried forward for consideration for the 2004 award, if the nominator so desires. The selection committee will contact nominators to determine whether they wish to submit a revised nomination to the selection committee.

Previous Teaching Award Recipients

The section has presented the Award for Distinguished College or University Teaching of Mathematics each year since 1992. The recipient list is:

- 1992 Anne Hudson, Armstrong State University
- 1993 Robert Bryant, Duke University
- 1994 John Neff, Georgia Institute of Technology
- 1995 Sylvia Bozeman, Spelman College
- 1996 Carl Pomerance, University of Georgia
- 1997 Harold Reiter, Univ. of North Carolina at Charlotte
- 1998 Joel Brawley, Clemson University
- 1999 Ben Klein, Davidson College
- 2000 Theodore Shifrin, University of Georgia
- 2001 Johnny Henderson, Auburn University
- 2002 Ronald Harshbarger, University of South Carolina, Beaufort
- 2003 Sue E. Goodman, University of North Carolina, Chapel Hill

Eligibility Requirements and Guidelines

Each nominee

1 - must be a teacher of mathematical sciences at a public or private college or university in the US or Canada (including two year colleges) whose assignment during the current academic year is at least half time. (Teachers on approved sabbatical leaves are also eligible provided they met this requirement during the previous academic year.)

2 – must have at least five years of teaching experience in a mathematical science.

3 – must be an active member of the Mathematical Association of America.

4 – should be widely recognized for extraordinary successes in teaching*.

5 – should have fostered curiosity and generated excitement for mathematics in students and possess teaching effectiveness which can be documented.

6 – should have had influence beyond their own institutions**.

The Nomination Packet -- A completed nomination packet should consist only of the following material:

1 – a completed nomination form (on the back of this page).

2 - a narrative of at most five pages^{***} that describes the nominee's background, experience, teaching style, involvement in the MAA and/or other organizations concerned with college teaching, and other special contributions and appropriate information not on the nomination form.

3 – at most three additional pages*** documenting extraordinary teaching; e.g. summaries of peer or student teaching evaluations (with explanations), successes in increasing mathematics majors or successes with masters or doctoral students, involvement in successful student competitions, campus teaching awards, etc.

4 - a maximum of five letters of recommendation, each limited to one page, with at least two letters from present or former students and at least two letters from colleagues, one of whom may be the department chair.

Awards for Distinguished College or University Teaching of Mathematics Nomination Form

Please type.

Nominee's Name (first name first):		
College or University Affiliation:		
College or University Address:		
City:	State:	ZIP:

Nominee's number of years teaching experience in a mathematical science:

Has the nominee taught at least half time in a mathematical science during the current academic year or during the previous year if on approved leave or sabbatical?

In the space below, please describe briefly the unusual personal and professional qualities of the nominee that contribute to his or her extraordinary teaching success.

Please take the time to assemble the dossier in a thoughtful manner so as to make as strong a case as possible. Please adhere closely to the guidelines given above and include the items that are requested. If you are resubmitting a previous nomination, please be sure that it has been updated, rewritten as is necessary, and that some recent letters have been included.

The winner of the Southeastern Section Award will be the Section's nominee for the national Haimo Award, and since the winner's nomination packet will be forwarded to MAA headquarters, each packet should be as complete as possible. However, a curriculum vitae should not be submitted since all relevant teaching information will be contained in the documents mentioned above.

* 'teaching" is to be interpreted in its broadest sense and is not necessarily limited to the classroom.

** 'influence beyond an institution'' can take many forms; e.g. demonstrated impact on alumni, influence on the profession through curriculum development/revisions, influential, innovative books, etc.

*** each of these pages should be typewritten and double-spaced on a single side of standard 8.5x11 paper in no less than 12 point pica.

The Procedure

Send a complete packet by October 31, 2003 to the chair of the selection committee:

Ted Shifrin, Department of Mathematics, University of Georgia. Athens, GA 30602-7403

Section Meeting with SIAM-SEAS March 21-22, 2003 Clemson



Tillman Hall

When I was at Clemson in the 1980's the mathematical sciences department claimed the weather always cooperated for football games and mathematics conferences. It was certainly true for our 82nd meeting, a joint one with the Southeastern Atlantic Section of SIAM (SIAM-SEAS). With such a beautiful spring weekend in South Carolina many people took breaks outside and listened to the carillon music from Tillman Hall.

Many thanks go to Mark Cawood and Chris Cox of the Mathematical Sciences Department who proposed and organized this joint meeting. They credit Suzanne Lenhart with the original concept of combining these two regional chapters and it was a great match. In fact, the Executive Committee voted to recommend to the Site Selection Committee that the Section plan to meet with SIAM-SEAS at least once every four years. In addition to regular MAA activities, participants enjoyed four invited talks, a student Jeopardy Contest, awards for best student presentations, a Celebrity Jeopardy Contest and a lot of good food.

Six short courses ran on Friday morning. William P. Fox and Richard West presented *Perfect Partners: Mathematical Modeling, Discrete Dynamical Systems and Technology.* Laurie Heyer presented *Computational Genomics.* Shuhong Gao presented *Algebra and Number Theory in Cryptography.* Dan Warner, Holly Hirst, and Bob Panoff presented *Computational Modeling in Service of Undergraduate Teaching.* Nieves McNulty and Madeleine Schep presented *Enhancing Logical Reasoning through Lego Robots.* And Steve



Discussing graduate programs at TA Rush.

Edwards presented *Miles of Tiles – Patterns in the Plane.*

Student attendees had a larger selection of activities than in the past including a Jeopardy Contest. It took two rooms to hold a TA Rush with tables from about a dozen graduate schools and, for the first time, tables from the NSA, AWM, and SIAM. In addition to these two traditional MAA activities students 24 MAA Southeastern Section Newsletter enjoyed traditional SIAM activities such as a Jeopardy Contest and student presentations competition.

The Jeopardy Contest began with twelve teams from Clemson University, Coastal Carolina University, College of Charleston, East Tennessee State University, Furman University, Georgia Southern University, Kennesaw State University, Meredith College, Methodist College, The Citadel, the University of Tennessee, and Western Carolina University. Three preliminary rounds were held on Friday and the Final Round was held on Saturday afternoon. As in the original Jeopardy, students select categories and an answer is given. The students must respond with a question. The topics were Computer Science, Differential Equations, Calculus I and II, and Linear Algebra. An example of an answer is 'the derivative of $f(x) = sec^2(x) - tan^2(x)$." Four South Carolina teams made it to the final round. The College of Charleston came in first, The Citadel came in second, Coastal Carolina came in third and Furman University came in fourth. The students had such a good time that this may become a regular part of our meeting.



The final four in Jeopardy with coaches and host Michael Berry.

Student presentations and posters were given awards this year in keeping with a SIAM-SEAS tradition. The categories were Undergraduate Student Papers, Undergraduate Student Posters, and Graduate Student Papers. Cash awards were given for the first, second and third places in each category. The winners are given below.

Undergraduate Student Papers

1st **Place:** a tie. *Flipping Geometry* by Shaun Lynott of Elon University and *Paths That Turn at a Constant Rate: Special Curves in the Hyperbolic Plane* by Rob McLean of Davidson College

 2^{nd} Place: a tie. Strategies for re-establishment of the American chestnut in the Appalachians by Amelia Nutter of University of North Carolina at Asheville and Fibonacci Vectors by Ena Salter of Georgia Southern University 3^{rd} Place: a tie. Colors, Clusters and Approximating the SVD by Nick

Orlowski of North Carolina State University and A Rate Dependent Preisach Operator for Modeling A Piezoelectric Stack Actuator by Jeremy Poling of Ferrum College.



Undergraduate Student Posters 1st **Place:** A Predator-Prey Model with Disease Dynamics by Chris Flake of North Carolina State University and University of Nebraska-Lincoln REU

2nd Place: Computations of the Partition Function, p(n) by Elizabeth Perez of Wake Forest University and Jimena Davis of Clemson University

Bob Bernhardt hands out student poster awards. **3rd Place:** *The Hamming (7,4) Code* by Aminah Perkins and Andrea Warren of Spelman College

Graduate Student Papers

1st **Place:** *Maximal Sets of Hamilton Cycles* by Sasha Logan of Auburn University

2nd Place: Cone-Based Modeling of Preferences in Multicriteria Optimization by Brian J. Hunt of Clemson University

3rd Place: **a tie.** Orthogonal quadruple systems and 3-frames by Brian Muse of Auburn University and *The Fractional Advection Dispersion Equation* by John Paul Roop of Clemson University.

Since it was a joint meeting there were four invited speakers this year.

Margaret Wright of the Courant Institute of Mathematical Sciences started the meeting with *Optimization is Everywhere*. She discussed the 1984 revolution in linear programming. Before 1984, nonlinear programming was considered completely different from linear programming, the simplex method dominated in linear programming and it was felt methods used for nonlinear programming could not be used in the other case. She illustrated the revolution with a famous exchange between F. Scott Fitzgerald and Ernest Hemingway. Fitzgerald said to Hemingway, "The rich are very different from you and me".



Margaret Wright

Hemingway responded, "Yes, they have more money." After 1984, barrier methods, which had fallen out of favor in the 1970's for solving nonlinear programming problems, were found to work quite well for linear programming

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26 MAA Southeastern Section Newsletter problems. Since that revolutionary year there has been continuous improvement on both the interior point method (a particular barrier method) and the simplex method but no consistent winner. All serious commercial codes give the user a choice of methods for solving a linear programming problem.



Ronald Harshbarger

Ronald Harshbarger of USC-Beaufort presented *Risky Business: Investigating the Connection between Mathematics and Business Concepts.* As the winner of the 2002 Southeastern Section Teaching Award he discussed how he uses the language and graph drawing methods used by economics professors to help students understand the mathematics behind their business. The technique allows students to discover the ideas behind the mathematics by linking them

to the concepts they have already studied in their business courses.

In *The Adventure of Mathematical Ideas*, John Baxley of Wake Forest University gave a retrospective of collaborations with students in calculus research from his distinguished career. His final slide summed it up best.

Conclusions from Baxley

- 1. The youth, energy and enthusiasm of students is a wonderful thing.
- 2. The calculus, that wonderful legacy of Newton and Leibniz, even at the ripe old age of 300-plus years retains its vitality and is even now a very powerful mathematical toolbox.



John Baxley

In her introduction to current MAA President Ronald Graham of the



Ronald Graham

University of California at San Diego, Governor Theresa Early pointed out he was one of only six people who had been both president of the MAA and AMS. She added that she was pretty sure he was the only one of the six who had also been president of the International Jugglers Association. His talk on *Guessing Secrets* focused on message passing on the internet and how a Seeker, who wants to discover the secrets of an Adversary from the message, develops a questioning

Vol. 22, No. 1, Spring 2003 strategy that will hopefully reveal the secrets. He concluded the talk in the style of Paul Erdos by presenting unsolved problems and offering monetary rewards for the solutions. Most were problems originally proposed by Erdos.

At the Friday afternoon Awards Presentation, Ted Shifrin presented the Southeastern Section Award for Distinguished College or University Teaching of Mathematics to Sue E. Goodman of The University of North Carolina-Chapel Hill, and Hugh Haynesworth announced that Sylvia Bozeman had received the Southeastern Section Award for Outstanding Service. See the accompanying articles beginning on page thirteen for details.

Immediately after the awards presentation, participants went to a barbeque dinner at Clemson House. The evening's entertainment included a Celebrity Jeopardy contest hosted by Governor Theresa Early. Each team paired a past section officer with a current officer - David Stone with Martha Abell, Joel Brawley with Stephen Davis, and Sharon Ross with Ray Collings. Topics included Reel Analysis, Sour Lemmans, Pop Quiz, Group Therapy and Loop Holes. An example of an answer is "The Logical Term for two Ph.D.'s". The Question? What is a paradox? (of course!) The winners were David Stone and Martha Abell.



Celebrity Jeopardy participants (l to r) David Stone, Martha Abell (behind Stone), Joel Brawley, Stephen Davis, Sharon Ross, Ray Collings and Theresa Early (standing) .

The meeting ran through Saturday afternoon with the Jeopardy Final finishing the day. Additional pictures of the meeting appear at the end of the newsletter in Scenes from the Meeting.

Virginia Watson

MAA Southeastern Section Newsletter Section Business Meeting March 22, 2003

The meeting was called to order by Section Chair Ray Collings at 8:00 a.m. on March 22, 2003 on the campus of Clemson University. The group then heard from Theresa Early, Governor of the Section. She mentioned several professional development opportunities brought about by grants obtained at the national level by Tina Straley, Executive Director of the MAA. She displayed fliers for project PREP



Governor Theresa Early delivers her report while Secretary/Treasurer Martha Abell takes the minutes.

(Professional Enhancement Programs) and PMET (Preparing Mathematicians to Educate Teachers). The nearest PREP Program to our section will take place at Wake Forest University while the closest PMET Program will occur at Appalachian State University this summer. She also brought up the fact that in the next national election for MAA officers, members will be mailed a ballot but will have the option of voting on-line. (The slate of national officers appears in the March edition of Focus.). She then discussed the recent election for Governor of the Section in which many Section members did not receive ballots. Theresa Early pointed out that she had contacted the national office and found that members who had not had their renewals processed by the end of January did not receive a ballot in the mail. She encouraged members to renew earlier in the future. As this was her last meeting as Governor, she told how much she had enjoyed serving the Section. She also mentioned that there were three excellent candidates for her replacement. In addition, she mentioned that two people associated with our Section are also serving on the Board of Governor's, Dan Teague of the North Carolina School for Math and Science represents high school teachers and Carl Pomerance represents mathematics outside of academia.

As chair of the Nominations Committee, Theresa Early thanked the members of the committee and introduced the candidates for open positions. The nominees for Section Officers for 2003-2004 were: Vice Chair for Two-Year Colleges, Virginia Parks (Georgia Perimeter College); Section Lecturer, Jeff Knisley (East Tennessee State University); Newsletter Editor, Virginia Watson (Kennesaw State University). Continuing the nominees for the State Director Positions are: Alabama, Leigh Lunsford (Athens State University); Georgia, Sabrina Hessinger (Armstrong Atlantic State University; has served 2 years); North Carolina, Robert Harger (High Point University); South Carolina, John Harris (Furman University); Tennessee, Gary Hall (Lipscomb University, has

served 1 year). Ray Collings asked for additional nominations from the floor. Being none, Walt Patterson moved that the nominees be elected by acclamation. The motion was seconded by Susan Patterson and approved by acclamation. Note that the incumbents are: Stephen Davis (Chair-Elect), Martha Abell (Secretaty-Treasurer), Virginia Watson (Newsletter Editor), Joe Wimbish (Program Chair), Gary Hall (TN State Director), Sabrina Hessinger (GA State Director), Sid Stubs (Webmaster), Joe Albree (Historian), John Harris (Project NeXT Director)

Secretary-Treasurer Martha Abell presented a financial report and noted that the treasury is approximately the same as it was at this time last year. She also expressed appreciation for the assistance that Stephen Davis (former Secretary/Treasurer) has offered this year. She also noted that the costs for photocopying the newsletter were less this year than last. The Section has also received several individual contributions this year for general expenses as well as for student activities. She also reported that all costs for the meeting this year (except for the costs of refreshments for the Project NeXT meeting) will be taken care of by Clemson University thanks to the contributions of several vendors. (See the resolutions.)

The Secretary-Treasurer offered four resolutions that were adopted by acclamation.

Resolution #1: The Southeastern Section of the Mathematical Association of America expresses warm appreciation to the Department of Mathematical Sciences at Clemson University, and to the administration of Clemson University, for providing excellent facilities for the 82nd annual meeting. We have been the beneficiaries of their hard work, extraordinary efforts, gracious hospitality and helpfulness in attention to many details that such a meeting involves. We mention in particular the contributions of the following individuals.

Clemson University: Mark Cawood Chris Cox Terri Johnson Shari Prevost Bob Fennell Doug Shier Lynn Callahan (Admin. Asst. – nametags, reservations, etc...)

SIAM-SEAS Math Jeopardy Game: Mike Berry and Yiheng Yang (UT-Knoxville)

Poster Session on Undergraduate Research: Bob Bernhardt (East Carolina University)

MAA Southeastern Section Newsletter Resolution #2: The Southeastern Section of the MAA expresses warm appreciation to the following companies for their informative and attractive displays presented at the 82nd annual meeting:

Brooks/Cole Prentice Hall Addison Wesley Wiley Texas Instruments Houghton/Mifflin

We also thank these companies for their generous financial support, enabling the refreshments and commercial presentations that contributed greatly to the success and enjoyment of the meeting.

Resolution #3: The Southeastern Section of the MAA expresses its gratitude to the presenters of short courses at the 82nd annual meeting:

Perfect Partners: Mathematical Modeling, Discrete Dynamical Systems and Technology William P. Fox and Richard West (Francis Marion University) Computational Genomics Laurie Heyer (Davidson College) Algebra and Number Theory in Cryptography Shuhong Gao (Clemson University) Computational Modeling in Service of Undergraduate Teaching Dan Warner (Clemson University), Holly Hirst (Appalachian State University), and Bob Panoff (Shodor Foundation) Enhancing Logical Reasoning through Lego Robots Nieves McNulty and Madeleine Schep (Columbia College) Miles of Tiles – Patterns in the Plane Steve Edwards (Southern Polytechnic State University)

We commend these individuals for their service to the Section through the presentation of these inviting and stimulating courses.

Resolution #4: The Southeastern Section of the MAA acknowledges with genuine appreciation the excellent and faithful leadership and dedicated hard work of those officers completing their terms of service:

Ray Collings, Chair Patty Monroe, Vice-Chair for Two-Year Colleges John Baxley, Section Lecturer Theresa Early, Section Governor Virginia Watson, Newsletter Editor Jeff Dodd, Alabama State Director

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Vol. 22, No. 1, Spring 2003 Bob Bernhardt, North Carolina State Director Subhash Saxena, South Carolina State Director

We anticipate with delight and pleasure their continued presence among us, as well as their valuable contributions to the Section in the future.

Ray Collings announced that the Site Selection Committee had recommended three sites for the Executive Committee to consider. The institutions were Appalachian State University (Boone, NC), Meredith College (Raleigh, NC), and Elon University (Elon, NC). After some discussion, the group approved the recommendation of the Executive Committee that the 84th Annual Meeting of the Section be held at Meredith College, March 11-12, 2005.

National Treasurer John Kenelly reported that the Halmos Grant (of 3 million dollars) is being used to renovate the Carriage House in Washington, D.C. The building will be used as a national conference center that will offer seminars for university professors to promote improvements in teaching. The staff of NSF will be able to meet with participants. He also encouraged members to visit the National Headquarters of the MAA.

Ray Collings announced that the Section needs an Advertisement Editor for the Newsletter.

Hugh Haynesworth, Chair of the Service Award Committee, encouraged members of the section to submit nominations for the Section Service Award each year. Nomination forms may be found in the Fall 2003 Newsletter. This is also the Southeastern Section's year to nominate someone for the national service award. Because some of the members of the Service Award Committee are eligible for the national award, Ray Collings and Marcellus Waddill will serve on the committee to select the Section's nominee for the national award. The announcement will be made next January.

Jim Vandergriff, the Site Coordinator for the 2004 Section Meeting at Austin Peay, University invited all members to his campus March 26 –27, 2004 (*ed. note: this is a change from the announced date*). The school is located 45 minute s north of Nashville, TN. He plans to invite members of the Kentucky Section to attend as well.

The meeting was adjourned at 8:55 a.m.

News from the States



Al abama: Jeff Dodd, State Director, Jacksonville State University, Jacksonville, Al 36265. email: jdodd@jsucc.jsu.edu

The 8th Annual Alabama State Dinner Meeting was held at the University of Alabama at Huntsville (UAH) on Friday, February 14, 2003. An enthusiastic group of 48 people attended the dinner this year to hear Professor Joseph Neggers of the

University of Alabama at Tuscaloosa present a talk entitled "What is a Fuzzy Random Variable?". In this fascinating talk, Professor Neggers shared with us some of his philosophy of mathematical discovery in the context of the specific question posed by its title. Kyle Siegrist of UAH did a fine job making all the local arrangements for this event.

As is the tradition in Alabama, this meeting was followed the next day (Saturday, February 15) by the 53rd annual conference of the Alabama Association of College Teachers of Mathematics (AACTM) at UAH. This year, the conference' s invited lecture, the LewisParker Lecture, was delivered by Olav Kallenberg of Auburn University, who spoke on "The Basic Symmetries of Probability Theory". (This is also the subject of a forthcoming book by Professor Kallenberg.) The conference also included numerous interesting contributed papers. Congratulations to AACTM President Bruce Atkinson of Samford University and Kyle Siegrist of UAH on organizing a very successful event.

The AACTM now has a web site: <u>http://aactm.jsu.edu/</u> maintained by Tom Leathrum of Jacksonville State University, who will also preside over AACTM as president for the 2003-2004 academic year.

The 23rd annual Alabama Statewide Mathematics Contest for high school students, directed by Jeff Dodd of Jacksonville State University with the help of many faculty members from JSU and several other Alabama universities, is underway again this year and should be complete by the time this newsletter goes to press. (See <u>http://mcis.jsu.edu/mathcontest</u>.) The contest will have a new director next year: Professor Jac Cole of Huntingdon College in Montgomery.

The Mobile Mathematics Circle is in its third year at the University of South Alabama. Funded in part by a generous grant from the Alabama Space Grant Consortium, the Mobile Mathematics Circle is a problem solving group that meets each Monday evening. About 60 high school students from several local

area high schools attend, solve problems and learn interesting mathematics that they would not obtain in their ordinary curriculum.

On Monday March 3, the University of South Alabama hosted their 3rd annual Mathematical Olympiad. Six challenging problems were presented to a group of energetic students who had two hours to solve the problems. The top two finalists will attend the Seventh Manhattan Mathematical Olympiad in Kansas at the end of March.



Georgia: Sabrina Hessinger, State Director, Armstrong Atlantic University, Savannah, Georgia 31419 email: hessinsa@mail.armstrong.edu.

The 2003 Georgia state dinner was enthusiastically hosted by Kenessaw State University in Kennesaw, February 15th. Dr. Suzanne Lenhart gave a talk entitled "Optimal Control to Various Population Models." A special thanks to Virginia Watson who,

on top of everything else she does for the section, also managed to organize this year's dinner with much support from Mari Castle, the president of Kennesaw's student chapter of the MAA.

This October Kennesaw will host the 23rd Annual Southeastern-Atlantic Regional Conference on Differential Equations. The University of Georgia in Athens, GA will hold a VIGRE Research Experience for Undergraduates this summer from June 9th to July 11th. Research topics include analysis on metrized graphs and computation of geometrically optimal knots. Audrey Powers, a junior at Agnes Scott College, won a Goldwater Scholarship for the upcoming year, after presenting her results on "The Geometry of the Hausdorff Metric" at two national meetings.

Armstrong Atlantic State University held its silver anniversary statewide high school mathematics tournament on February 15th with participation from over 500 students at 42 schools from Georgia and nearby states.



Orth Carolina: Bob Bernhardt, State Director, East Carolina University, Greenville, NC 27858. e-mail: bernhardtr@mail.ecu.edu

One of the three Wake Forest teams entered in this spring' s COMAP mathematical modeling contest won an "outstanding" designation. This is the fourth year in a row that a Wake Forest team has received an "outstanding" award.

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MAA Southeastern Section Newsletter On March 29, 110 middle school and high school students participated in the annual Wake Forest Mathematics Contests (Algebra I, II, and Geometry). This contest is organized each year by David Wilson.

Justin Brockman, a double major in Physics and Applied Mathematics at North Carolina State University, won a Goldwater Scholarship. Another NC State double major in Applied Mathematics and Chemical Engineering received a Fulbright Grant. Franklin Goldsmith will study for one year at the Institute for Applied Mathematics at the University of Freiburg (Albert-Ludwigs University of Freiburg).

The North Carolina affiliate of the American Mathematical Association of Two-Year Colleges (AMATYC) met in Wilmington during March. The conference attracted more than 100 mathematics educators and offered an outstanding array of sessions and workshops. Phil Mahler, President of AMATYC, was the keynote speaker. AMATYC is working on revisiting the 1995 Crossroads document. Several AMATYC members from the SE are involved in the writing teams. Wake Tech CC will host an AMATYC Summer Institute this coming May. The workshop will focus on "Workplace Research."

East Carolina University is hosted the annual state MAA Dinner on April 25th. The speaker was Robert L. Bernhardt of East Carolina University, who spoke on "What is Mathematics?"

The NC State Mathematics Competition has been conducted at various sites over the state. East Carolina University held its contest on March 18th, with 52 schools and 650 students participating.

Elon students fielded three teams in this years COMAP; one team (Daisy Cunningham, Adam Benjamin, and T.J.~Zeller) received a grade of Meritorious; one team (Ryan Huff, Ryan Barnard, and Phil Pigg) received a grade of Honorable Mention; and one team (Bob Davis, Katie Iwancio, and Brian DeYoung) received a grade of Successful Participant. As in previous years, the department hosted its High School Mathematics Contest on March 1, with students proctoring the exam and running "math sprints" after lunch.

On April 3, Bill Dunham of Muhlenberg College delivered the second annual Parson' s Lecture at the University of North Carolina Asheville. In his talk, entitled "Leibniz vs. Newton: Mathematicians at War," Professor Dunham entertained a rapt audience with scandalous details of the feud that erupted between these mathematical giants over credit for the invention of calculus. Professor Dunham is the author of the acclaimed books "The Mathematical Universe" and "Journey through Genius."

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South Carolina: Subhash Saxena, State Director, Coastal Carolina University, Conway, SC 29528-6054. email: saxenas@coastal.edu.

This year the South Carolina state banquet was hosted by Francis Marion University on February 21, 2003. Dr. Robert Bryant, J. M. Krebs Professor of Mathematics at Duke University, and a former section lecturer, made a presentation on the topic

'Geometry Old and New: From Euclid to String Theory". The number of participants exceeded forty, including a significant number of students. We also had some participants from North Carolina.

On May 9, Francis Marion University (FMU) will host the Annual Pee Dee Regional Mathematics Competition. This month FMU will host and grade the Pee Dee Regional AP-Calculus practice test. In December 2002, FMU hosted the Southern Regional Judging of the High School Mathematical Contest in Modeling. This past year FMU had seven students participate in the Virginia Tech Mathematics Contests and one team participate in the Mathematical Contest in Modeling.

Columbia College held its third Mathematics Day for Girls on Saturday March 29, 2003. Girls in 7th to 12th grades attended and were accompanied by a teacher or parent. Activities included hands-on workshops for both students and teachers, and competitions including written tests, a paper airplane contest, bridge building, and team problem solving. The winners came from James F. Byrnes High School, Lakewood High School, Indian Land High School and Aiken Middle School.

At the Citadel, Dave Trautman hosted the department' s 30th annual mathe matics competition for high-school students in February. Dr. Julian Palmore, Professor of Mathematics and Program in Arms Control, Disarmament, and International Security at the University of Illinois at Urbana-Champaign visited the department for two days, he gave a colloquium talk titled "Mathematical Issues in National Security".

The National Science Foundation has awarded a three-year RUI grant of \$148,000 to Dr. Annalisa Calini and Dr. Thomas Ivey of the College of Charleston, for support of their project 'Integrable Dynamics of Knotted Vortex Filaments'. The grant also provides summer funding for two undergraduates to collaborate in this research. The College of Charleston recently hosted the Southeastern Geometry Conference, a floating conference that attracts speakers and participants who are experts in a variety of sub-disciplines of geometry including differential geometry, algebraic geometry, topology, and applications of geometry to mathematical physics. This year's

MAA Southeastern Section Newsletter conference was financially supported by the Math Department at the College of Charleston and an NSF grant managed by the University of Georgia. In February, the College of Charleston's Department of Mathematics hosted the 26th Annual 'Math Meet'. This event brings hundreds of high school students to the campus for a day of creative and fun math/science competitions. This year, 758 students participated from North and South Carolina, Georgia, and Tennessee. In addition to the competitions, the participants and teachers are invited to a few noncompetitive events. Professor Jim Young gave a lecture this year on the concept of 'Randomness''. Jeff Wragg of the Physics Department once again entertained Math Meet participants with his 'Physics Guy" persona and demonstrations of some surprising physical phenomena. This year the Math Club also hosted a showing of the film "A Beautiful Mind" about mathematician John Nash to welcome Math Meet participants.

The Department of Mathematics at the University of South Carolina-Columbia will publish its second annual departmental newsletter this spring. Send an email to sumner@math.sc.edu if you' d like to be on our newsletter mailing list. Our department hosted the University's Homecoming 2002 and honored professor Thomas Markham for his years of distinguished service to the department and a scholarship was established in his name. The department was saddened by the death of Dr. Marguerite Hedberg, who served on our faculty from 1946-1976. Her will included a contribution to the University to establish an endowment for the Wyman L. Williams and Ernest Albert and Marguerite Zeigel Hedberg Chair of Mathematics.

Two hundred and twenty-six middle and high school students competed in the 24th annual CCU-Verizon Math Contest March 28 on the Coastal Carolina University campus. Twenty-two South Carolina schools and one Tennessee school took part in this year's event. This year for the first time the contest was also opened to middle schools. School competition winners by category were:

> Middle Schools: Myrtle Beach Middle Small Schools - Level I: Waccamaw High School Large Schools - Level I: Dobyns-Bennett High School Small Schools - Level II: Aynor High School Large Schools – Level II: Summerville High School Overall Winner: Dobyns-Bennett High School

Individual student winners were: Nora Bennaini, Waccamaw High School; Peter Dong, Carolina Forest High School; Kenny Fladger, Mullins High School; Scott Imler, Aynor High School; Matthew Henderson, Aynor High School; Matthew Herbaugh, Aynor High School; Matt King, Summerville High School; Tyler Knowles, Waccamaw High School; Katie Lloyd, Mullins High School; Zachary Miller, Aynor High School; Peter Maginnis, Dobyns-Bennett High School; Kenny Pearson, Lake View High School; Anthony Sanderson, Myrtle Beach Middle School; Justin Shelby, Summerville High School; Kevin Smith, James Island High School.

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Students in the competition were given written examinations. Level I questions were taken from Algebra I, Algebra II and Geometry; Level II questions were taken from Algebra, Geometry, Advanced Algebra and Trigonometry. Winners received \$100 for first place, \$75 for second place and \$50 for third place in each category.

2002. It is partially sponsored by Verizon. The results are as follows:

- Overall Winner: Dobyns-Bennett (Kingsport, TN)
- Small Schools Level I: Waccamaw
- Small Schools Level II: Aynor
- Large Schools Level I: Dobyns-Bennett
- Large Schools Level II: Dobyns-Bennett



Tennessee: Gary Hall, State Director, Lipscomb University, Nashville, 37204-3951. email: Gary.Hall@lipscomb.edu.

On April 26 we had our state dinner at Lipscomb University. To encourage more undergraduates to attend the dinner we tried something different than in the past. We had a more relaxed atmosphere at the meeting with a traditional Tennessee barbeque dinner. By doing this we hope to not be as

intimidating to undergraduates and to be less expensive so that more can afford to come. Also, the speaker was Dr. Carroll Wells who is retired from Western Kentucky University and presently at Lipscomb. He is the winner of many other teaching awards including the 1994 Kentucky Sectional University Mathematics Teacher Award. His presentation was on Math and Hollywood, and the talk is geared toward undergraduates, in keeping with our theme this year.

Two other quick items: Austin Peay University is already busy at work getting ready for next year's Southeastern Sectional meeting; and we are very happy that our own Jeff Knisley from East Tennessee State University was selected as next year's Section Lecturer.

Student Chapter News

Alabama

This academic year, Dr. Jan Case and Dr. David Dempsey are co-advisors for the **Jacksonville State University** Math Club. We have had several social activities, including a card night ('Applied Probability Seminar') and two bowling nights ('Practical Seminar in Applied Vector Analysis of Collisions Between Spherical and Non-Spherical Bodies'). For our March meeting, we invited Dr. Ed Smith to give a talk on 'Dangerous Excursions in 3 Dimensions'', a lively and understandable research talk he presented at the AACTM annual meeting in Huntsville this year. Both his talk and the pizza were well-received.

South Carolina

Francis Marion University had eight members of our mathematic club providing community service by teaching Origami at the Francis Marion University Arts Alive Festival.

The MAA Student Chapter at **Presbyterian College** hosted its Sixth Annual Mathematics Competition on March 26. First prize went to T. Q. LeBlanc, second prize to Shannon Innes, and third prize (tie) to Thomas Cameron and Hector Rincon

The Math Club at **Clemson University** has organized a seminar for *undergraduate* presentations during the 2002-03 academic year. Talks were presented on research results from participation in Research Experiences for Undergraduates and other topics of general interest. Jon Bayless (May 2003 graduate) organized this year's seminar.

career and graduate school opportunities for mathematics majors.

Consider a Contribution

in support of

MAA-SE Student Activities

See page 10 for Details

Scenes From the Meeting



Organizer Mark Cawood (left) relaxes with Joel Brawley..



The Atrium of Bracket Hall was perfect for vendors.



Jackie Huband, SIAM-SEAS President, introduces Margaret Wright.

MAA Southeastern Section Newsletter



Elon University students wear great t-shirts every year!.



Ron Graham (left) talks with Ray Collings at the social.



All roads in Clemson have tiger paws.