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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.

Material may be submitted to the editor on paper, by email, or on 3.5" diskette, electronic forms are preferred. Currently the newsletter is produced using Microsoft Publisher, which can import plain text files or files produced by most word-processing software.

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### **Section Calendar**

August 2-4, 2001	Mathfest 2001, Madison, WI
October 5-6, 2001	AMS Regional Meeting, Chattanooga, TN
January 6-9, 2002	MAA/AMS Annual Meeting, San Diego, CA
March 8-10, 2002	Joint Southeastern Section MAA and Southeast Regional AMS Meeting, Atlanta, GA
August 1-3, 2002	Mathfest 2002, Burlington, VT
January 15-18, 2003	MAA/AMS Annual Meeting, Baltimo re, MD
March 21-22, 2003	Joint Southeastern Section MAA and Atlantic Section SIAM Meeting, Clemson, SC



### From the Editor

W elcome to the second newsletter published under my tenure as editor. As you may have noticed from the fall newsletter, and most certainly will notice from this one, the appearance of the newsletter has changed. The new appearance results from the features of Microsoft Publisher, the

software package I use to produce it. I want to first point out some of the visible changes and then a not so visible change.

A table of contents is on the first page along with a publication statement. In particular, the statement gives March 15 and October 15 submission deadlines for the spring and fall newsletters, respectively. A picture of the officer now appears with his or her article. Meeting pictures are captioned and interspersed throughout the newsletter. Finally, advertisements and special announcements are boxed-off for easier identification.

The less visible change concerns advertisements. Everyone is familiar with the graduate program ads which appear mostly in the fall edition. You are probably unaware that we accept corporate ads since none have appeared in recent years. At the Spring Meeting the Executive Committee approved quarter page ads for department positions. If you are interested in advertising with us, please contact the advertising manager, Marla Bell, for details. Her contact information is in the publication statement.

Since I am discussing changes, I want to mention an exciting one for the Southeastern Section. On March 8-10, 2002 we will hold a joint meeting with the Southeastern Section of the AMS. Please note the call for papers and organizers on page 8. The AMS website will contain all the information and deadlines pertaining to the meeting, our section website will simply point to their site. Check it frequently for updates. An important change will be in the deadline for submission of contributed papers. It will be about three months before the meeting, earlier than usual, and firm.

If you have any questions, comments or suggestions about the newsletter, please let me know.

### Virginia Watson



### From the Chair

WW OW! What energy resides in our MAA Southeastern Section. As I think over our activities past and future, what a privilege it is to live and teach mathematics in the various communities of our five-state region!!

Many thanks to all who organized, spoke, and came (nearly 300) to our meeting at Huntingdon College March 30-31, including over 80 students. Local arrangements coordinators Bob Robertson and Sid Stubbs made us all feel at home in Montgomery, Alabama. Another Huntington faculty member, Joe Wimbish, pulled together a program long to be remembered. Favorite components that I heard attendees single out included "engaging plenary talks" and "so many wonderful student presentations", along with "the NeXT faculty are so exciting". And I know we all enjoyed networking - meeting new folks and renewing acquaintances, catching up on the latest in our professional and personal lives. Each time we come together is just the BEST.

So now we look ahead to our next two section meetings both featuring very special cooperation with other mathematical societies. First, in my hometown of Atlanta, is our MARCH 8-10, 2002, meeting at Georgia Tech with the Southeastern Section of the American Mathematical Society. Our site organizer, Richard Duke, has worked so nicely with both organizations' leadership to include all aspects of what is important in both MAA and AMS traditions. This truly joint-meeting will not be just two groups meeting in parallel at the same location. Jointly sponsored plenary sessions of interest to all are planned, including our section lecturer for 2001-2002, Robert Bryant, Duke University. Breakout session possibilities are endless - give some thought now to what you would like to present or special interest sessions you would like to organize. The submission of papers will be electronic as we've done in recent years, but using the AMS web-page (www.ams.org) as the host, and then AMS sending the information to our Vice-Chair for Programs for his usual magic in setting the final program. Please see the "call for papers" later on in this newsletter.

Second, and just decided in our Saturday business meeting at Huntington, is our MARCH 21-22, 2003, meeting at Clemson University with the Southeastern Atlantic Section of the Society of Industrial and Applied Mathematics. Site organizers Christopher Cox (clcox@math.clemson. edu) and Mark Cawood (cawood@clemson.edu) at Clemson are looking for a possible theme for this meeting, so please send your suggestions to them. Our meetings have always sought application and career content

that is a hallmark of SIAM - what an OPPORTUNITY.

Thank you to each one of you, making such a strong and productive section that serves as a consistently rich and fresh resource to our students and faculties, as well as a model of excellence to other sections of the MAA. What fun it is for me to be part of this organization. Best wishes for a good summer break and an excellent fall term 2001.

### **Ray E. Collings**

### LOOKING FOR A GREAT MATHEMATICS SPEAKER?

### Invite a Southeastern Section Lecturer to your campus!

**Robert Bryant** of Duke University is the 2001-2002 Section Lecturer. He will be available for the next two academic years. Contact him at bryant@math.duke.edu.

Andrew Granville of the University of Georgia is still available for the 2001-2002 academic year. Contact him at andrew@sophie.math.uga.edu.

Make your arrangements today!



### From the Governor

I am excited about the many externally funded programs available to members of the MAA. It will come as no surprise to those of us in the Southeastern Section that Tina Straley initiated many of these after she took over as Executive Director of the MAA. The total external support for programs either awarded in 2000 or for which

the MAA was notified that the award would be made comes to approximately \$4 million. The NSF grant writing workshops for Section Meetings have been favorably received with 16 of the 20 workshops already scheduled for the first of the two years of the project. One of the workshops was held as a short course at our Section Meeting in Montgomery.

A Professional Development program has been newly funded by the NSF. As part of the program, 25 workshops will be held over three years on topics including teaching undergraduate mathematical sciences content and pedagogy, mathematics for personal enrichment, career development and advancement, and graduate student teacher training. Audiences will include faculty at two-year and four-year colleges and universities as well as advanced graduate students.

The MAA has signed a contract with the Akamai Foundation for generous support of the MAA American Mathematics Competitions (AMC) over the next two years. The funding from Akamai will be used to enhance and extend the AMC programs with a goal of recruiting, recognizing, and rewarding a larger and more diverse group of deserving high school students. The new activities are: a scholarship program this year and next; a central USAMO (United States of America Mathematical Olympiad) testing and event for next year; and a mathematical "summer camp" that will be offered to all freshman, sophomore, and juniors who are invited to take the USAMO, not just the students who score the very highest. The scholarship program will recognize the top three winners of the USAMO and also the boy and girl who score highest on the second exam, the AIME (American Invitational Mathematics Examination), in each state, DC, and the territories. Money will be provided for an award ceremony in each state for the scholarship winners and other top students. The USAMO is the third of a series of progressively more difficult exams. This year, about 200 students will be invited to take the USAMO. For more information on the AMC, see http:// www.unl.edu/amc/.

More information can be obtained about all of these programs as well as other programs offered by the MAA by checking the MAA web page.

Let me encourage you to consider attending Mathfest this summer in Madison, WI, August 2-4, 2001. Attendance at the Mathfests has been steadily growing with an average attendance from 1997-2000 of 759. The one last summer in Los Angeles was a great success. Mathfest is, for the foreseeable future, a permanent part of the MAA since the MAA believes it is an important venue for MAA professional development activities. If you cannot attend this year, the 2002 Mathfest will be held in Burlington, VT, August 1-3. Put it on your calendar!

### **Theresa Early**

### 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 Section's prize goes to Kevin D. Lacker of Duke University. Congratulations also to Duke's team of Kevin Lacker, John Clyde, and Jonathan Curtis, which finished as the highest ranking team in the 2000 Competition.

### CALL FOR PAPERS AND ORGANIZERS

Southeastern Section MAA and Southeast Regional AMS Joint Meeting

### Atlanta

### March 8-10, 2002

### DEADLINE FOR ORGANIZERS: October 8, 2001

For

- . future submission deadlines
- online registration

Watch the AMS meeting site at

http://www.ams.org



### Spring Executive Committee Meeting

The spring meeting of the Southeastern Section Executive Committee was held Thursday evening, March 29, 2001, on the campus of Huntingdon College. The committee received an update on preparations for the imminent Section meeting at Huntingdon, and

each of the officers presented reports. Of particular concern was this year's greater reliance on the world-wide web for meeting information. While this considerably reduced postage expenses, the view was expressed that the meeting may not have had the visibility of past years. Several suggestions were advanced to address this concern.

State Directors reported on State Dinners in each state and the Governor distributed a report from the January meeting in Washington, DC (see the Governor's column in this newsletter). The Secretary-Treasurer shared a financial report and Vice-Chair for Two-Year Colleges Patty Monroe reported on her efforts to promote the Section at meetings of AMATYC. Newsletter Editor Virginia Watson shared an extensive report. There were 2600 copies of the fall Newsletter printed at an average of \$1.31 per copy; an effort is being made to reduce the per-copy cost of printing the News-letter. Currently, the only advertisements approved for the Newsletter are from graduate schools; the Editor proposed the inclusion of academic position ads, as well. After discussion of pros and cons, the Executive Committee approved this proposal.

Reports were also received from the Nominations and Site Selection Committees; these were relayed to the membership at the business meeting on March 31. Section Historian Joe Albree reported on progress in updating the history of the Section on our webpage, including the posting of all annual meeting programs in the history of the Section. Greg Rhoads reported on the Section's Project NExT, including special events in conjunction with the 80th annual meeting, and the start of a new class of Section NExTers with the meeting at Georgia Tech next spring.

In its concluding discussions, the Executive Committee approved an agreement with the AMS for next year's joint meeting. Registration for the joint meeting will be \$25 for MAA or AMS members, \$5 for retired members or students, and \$45 for non-members. Preliminary information for the meeting is already posted at

http://www.ams.org/amsmtgs/2081\_deadlines.html. Stephen Davis



### **Graduate Programs**

Programs leading to MA and PhD degrees are available in Algebra, Analysis, Applied Mathematics, Approximation Theory, Control Theory, Differential Equations, Probability, Statistics, Theoretical Computer Science, Topology and other areas.

### The Department

The research of our 31 faculty members represent most areas in pure and applied mathematics. The Department includes *The Institute for Constructive Mathematics* which performs applied research for government and industry. Three international journals have their editorial base at our department: *Constructive Approximation, Abstract and Applied Analysis and Journal of Theoretical Probability.* 

### **Financial Assistance**

• A limited number of University Graduate Fellowships of minimum \$11,500 for 9 months are available for **new students** starting Fall 2002. They carry a tuition waiver and no service for the department is required. Funds can be supplemented with partial Teaching Assistantship.

• Teaching Assistantships with minimum of \$11,500 for 9 months with tuition waiver are available. Students holding these awards perform instructional duties for the Department. Summer Teaching Assistantships are also available.

• A limited number of students are awarded Tharpe Scholarships in addition to their Teaching Assistantship or Graduate Fellowship. These awards range from \$2,000 to \$5,000.

### The University and Tampa

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

### 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/.

### Summer Seminar July 24-27

V. Frederick Rickey will be the lecturer at the North Central Section of the MAA 2001 Summer Seminar titled "The History of Mathematics". The seminar will be held from July 24 through July 27 on the campus of Bemidji State University in Bemidji, Minnesota. Flyers on the seminar will be available at the national meetings in New Orleans and more information is available at the following web site:

http://ea.bemidji.msus.edu/mathcs/seminar2001/

### Preliminary Announcement Project NExT-SE

Project NExT-SE is a professional development program for untenured mathematics Ph.D.s serving at institutions in our Section. The 2002 class of Project NExT-SE fellows will be forming soon. The first meeting of this group will be at next spring's Section meeting in Atlanta. Session topics will include teaching strategies and issues, tenure and promotion, grants, and helpful classroom ideas.

Be on the lookout for more information in the Fall. Until then, feel free to direct questions or comments to either John Harris (John.Harris@furman. edu) or Greg Rhoads (gsr@math.appstate.edu).

### Do members of your department wish they could have access to MathSciNet?

It may be more affordable than you think. The University of Tennessee at Martin is trying to form a consortium of schools *that don't currently receive hard copies of the Math Reviews*.<sup>1</sup> Depending on how many schools are interested, the total costs could be as low as \$300 annually for consortium members.<sup>2</sup>

If you have had difficulty lately hiring young PhD's who fear isolation from the research community, this could be a relatively cheap solution.

If interested, please contact:

John Schommer jschomme@utm.edu Department of Mathematics and Statistics University of Tennessee at Martin Martin, TN 38238

If you receive MR as three-year delayed fiche, you still qualify.

2

<sup>2</sup> The AMS pricing structure is discussed at <http://www.ams.org/bookstore/ mathsciprice.html>.

The AMS makes a 30-day free trial available for those academic institutions considering a consortia arrangement.

### Charles Cleaver Receives Distinguished Service Award

Hugh Haynsworth, chair of the Section Service Award Committee, made the following remarks upon presenting the award at the March 30, 3001 Awards Presentation.

The Mathematical Association of America Southeastern Section Distinguished Service Award is presented annually to a member of our Section who has made outstanding contributions at the Section level. The recipient of the 2001 Section Distinguished Service Award came to the



Bob Fray (left) presents award to Charles Cleaver.

Southeastern Section in 1983 as Professor and Mathematics Department Chair at the Citadel in Charleston, SC. During his tenure in the Southeastern Section, Charles Cleaver has a remarkable record of service to the MAA and to mathematics education in our Section. He has served a two-year term as Section Chair and chair of the Executive Committee, and three consecutive terms as SC State Director. He has also served on virtually every committee of the section, including the Executive Committee, the Nominations

Committee, the Site Selection Committee, the Distinguished Service Award Committee, the Distinguished Teaching Award Committee, the Resolutions Committee, the Committee on Minority Participation and the Local Arrangements Committee. He has encouraged active MAA participation in the section by others, including support of an active MAA Student Chapter at the Citadel.

Professor Cleaver has been a tireless ambassador of mathematics at all levels of the mathematics educational community. His service includes leadership roles in the South Carolina Council of Teachers of Mathematics and the South Carolina Association of Advanced Placement Mathematics teachers through numerous teacher institutes, workshops, conference presentations, committee service and a variety of offices, including a recently concluded term as President of the South Carolina Council of Teachers of Mathematics. He has represented the MAA on the SC State Mathematics Coalition, as a reviewer of various school examinations and materials, and on committees of the SC Commission on Higher Education and the South Carolina Department of Education. For thirteen years he has chaired the committee that selects and trains the South Carolina High School All-State Mathematics Team.

One colleague writes of Professor Cleaver, "As a member of the Executive Committee, Charles has always been a calm voice of reason, bringing an effective mix of pragmatism and idealism to the Section's activities. He has a can-do spirit, a great sense of humor, and is one of the nicest people in the world. As Section Chair, Charles was organized, thoughtful, considerate and a forward looking leader. He was concerned with issues of gender, diversity, and equal opportunity and paved the way for our efforts to encourage openness and diversity in the Section. The Southeastern Section has long been one of the MAA's strongest, and under Charles' leadership, it only gained strength."

It is a pleasure to present the 2001 Distinguished Service Award of the Southeastern Section of the Mathematics Association of America to Professor Charles E. Cleaver.

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

### Johnny Henderson Recipient of Section Distinguished Teacher Award

Stephen Davis, Section Secretary-Treasurer, made the following remarks upon presenting the award at the March 30, 2001 Awards Presentation.

It is with great pleasure that I announce that the winner of the 2001 Mathematical Association of America Southeastern Section Award for Distinguished College or University Teaching is Professor Johnny Henderson of Auburn University. Professor Henderson, will you please come forward?

Professor Henderson obtained his B.S. in 1973 and M.S in 1975, both in mathematics and both from the University of Arkansas. After completing



Professor Henderson

his MS he officially started his academic career by teaching at the University of Arkansas, Monticello from 1975-1977 where he was director of the remedial mathematics program and the general education advisor to undeclared freshmen and sophomores. In 1977, he began his doctoral studies in mathematics at the University of Nebraska, Lincoln and he received his Ph.D. from there

in 1981. He then took an assistant professorship at the University of Missouri, Rolla where he taught for three years. During those three years, he won two teaching awards.

In 1984, he was recruited to come to Auburn University as an Alumni Assistant Professor - the Alumni Professorships at Auburn are five year professorships which recognize outstanding teachers. Two years later, in 1986, he was promoted to Associate Alumni Professor and just three years after that, in 1989, he was named a Full Professor at Auburn. Last year, he was named the first ever "Scharnagel Professor of Mathematics," a chaired position recognizing outstanding contributions in both teaching and research. For not only is Professor Henderson an excellent teacher and mentor, but he is also an excellent researcher. An analyst who works on boundary value problems and nonlinear differential and difference equations, he has published two books and more than 170 research articles. Additionally, he serves on the editorial boards of four journals.

His teaching ranges from upper level graduate analysis cours es to the entire spectrum of undergraduate courses to remedial courses for at risk students, and he is extremely effective at all levels. On the graduate level he has directed the research of 11 Ph.D. students and 13 M.S. students and he is currently supervising five more graduate students. A close look at his Ph.D. students reveals that he has had tremendous success in graduating women and African-American students: indeed, five of his eleven Ph.D. students are women and two of them are African-American. His current graduate advisees also come from diverse backgrounds. But not only has Professor Henderson been successful as a mentor of graduate students, at the other extreme he has done an excellent job in coaching atrisk African-American students. His work with these students began in 1997 when Auburn instituted a four week "Summer Bridge Program" for at-risk students who wanted to major in sciences, engineering or mathematics. The University asked Professor Henderson to lead its efforts in this direction, he accepted the task, and for this past three summers has done a remarkable job in teaching precalculus in this program.

When Professor Henderson teaches a class, be it graduate, undergraduate, or remedial, students sign up in much larger numbers than usual. Comments from students over a wide variety of courses include the following :

- An engineering calculus student: "The best teacher I have had at Auburn! You should find more like him."
- A sophomore in his differential equations class: "Dr. Henderson is by far the best teacher I have seen in my life. Thank you, Dr. Henderson."
- A biology student in his 200 level statistics class: "Mr. Henderson is the best instructor I have had during my 5 years at Auburn. Statistics should not be this fun but it was."
- A mathematics education student in a senior level analysis course: "I have had some good mathematics instructors, but he is by far the best I have had. Prior to taking his class my selfconfidence had plummeted. I fully attribute my restored confidence to Dr. Henderson, and I am eternally grateful to him."

Affectionately known as Johnny to his students and described by one of them now teaching in the southeast as a "mathematical poet who loves his work", Johnny Henderson is most deserving to be winner of the 2001 Mathematical Association of America Southeastern Section Award for Distinguished College or University. Professor Henderson, it is a distinct honor to present you with this award. Congratulations.

### CALL FOR NOMINATIONS for the 2002 Award for Distinguished College or University Teaching of Mathematics

Nominations for the 2002 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 2002 meeting of the Section in Atlanta. 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 2003.

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 Ben Klein, chair of the selection committee. If you wish to nominate someone, you may submit a complete nomination packet by 1 November 2001. Alternatively, since the preparation of these materials may require information that is not readily available to you, you may submit a single letter to the chair of the selection committee by 1 September 2001. This letter should

1 – be limited to one page,

2 - clearly identify, with name, address and institutional affiliation, the person you are bringing to the attention of the selection committee,

3 - spell out the reasons you support the nominee as a potential recipient of the teaching award, and

4 - suggest, if at all possible, the name and address of at least one individual (for example a department chair) who is in a position to prepare a complete nomination packet.

Nomination packets for persons nominated for the 2001 award may be carried forward for consideration for the 2002 award, if the nominator so desires. The selection committee will contact nominators to determine whether the nomination should remain active, and, if so, whether the nominator wishes to submit an updating letter 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

# **Eligibility Requirements and Guidelines**

### **Each nominee**

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

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

4 – should be widely recognized for extraordinary successes in teaching\* 3 – must be an active member of the Mathematical Association of America.

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

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).

priate information not on the nomination form. ment in the MAA and/or other organizations concerned with college teaching, and other special contributions and appro-2 - a narrative of at most five pages<sup>\*\*\*</sup> that describes the nominee's background, experience, teaching style, involve-

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

4 - a maximum of five letters of recommendation, each limited to one page, with at least two letters from present or for-

Awards for Distinguished College or University Teaching of Mathematics	
Nomination Form	
Please type.	
Nominee's Name (first name first):	1 1
Concess on University AudressState:ZIP:	1 1
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 he previous year if on approved leave or sabbatical?	ic year or during

Mathematical Association of America

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.

mer students and at least two letters from colleagues, one of whom may be the department chair.

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

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

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

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

# The Procedure

nouncement of the award in this issue.) to the chair of the selection committee: Send a complete packet by 1 November 2001 or a one-page letter of nomination by 1 September 2001 (See the an-

Ben Klein, Department of Mathematics, Davidson College, Post Office Box 1719, Davidson, NC 28036

### Section Meeting March 30-31, 2001 Montgomery



Flowers Hall

D riving onto the campus of Huntingdon College, Flowers Hall immediately catches the eye. Behind the hall is a beautiful green stretching to the other end of campus. Benches interspersed amongst trees and small gardens are perfect for conversations or thinking. What a wonderful site for the 80th Annual Meeting.

Friday morning, Gary Kader and Mike Perry provided a short course entitled *Activities for the Introductory Statistics Course*. William Bauldry and Lawrence Moore presented a second short course entitled *Grant Writing*. The Grant Writing Workshop is one of 20 to be held over the next three years supported by funds from the NSF Division of Undergraduate National Dissemination Program. If you missed it, check out the national MAA website for one near you.

As mentioned in the *From the Chair* column, more than 80 students attended the meeting. TA Rush and the Pizza Lunch benefited from this as students spilled out onto the steps of the Delchamps Student Center. Well, the nice weather may also have helped.

This year, *challenges* seemed to be the theme running through the three excellent plenary talks. The exquisite symmetry of Ligon Chapel was the perfect backdrop for *Tidbits of Geometry Through the Ages* by Theodore Shifrin, the 2000 recipient of the Section Teaching Award. Several times he light-heartedly challenged the audience to reproduce the geometric drawings in his talk. Section Lecturer Andrew Granville began *Number Races* with a challenge between primes of the form 4n+1 and 4n+3. The race weaved through many historical paths to help us understand why primes of



Ligon Chapel

the form 4n+3 lead the race almost all of the time. Finally, Frank Morgan,

Second Vice-President of the MAA, presented *The Double Bubble Conjecture and Contest.* And what a contest it was! He challenged the audience with three bubble geometry questions. Those who answered all three correctly found themselves up front for the next round of the contest. Several questions later Michael Rogers of Oxford College of Emory University was the winner. Challenging talks are fun.





Frank Morgan (left) with winner Michael Rogers.

afternoon's Awards Presentation. Stephen Davis presented the Southeastern Section Award for Distinguished College or University Teaching of Mathematics to Johnny Henderson of Auburn University. Charles Cleaver of the Citadel was awarded the Southeastern Section Award for Outstanding Service by Hugh Haynsworth. The Awards presentation concluded with a drawing for students only. Jubilant Marlon Garner of North Carolina A&T University won a calculator donated by



Marlon Garner (right) with Bob Fray

Texas Instruments.

Immediately after the Awards Presentation the crowd adjourned to the BBQ dinner. Originally meant to be outside on the magnificent green, the rain soaked soil forced the event inside. The socializing, however, was not dampened.

If you were on the campus at 7:30 am on Saturday morning, you must have been attending the Liaison Breakfast. Over coffee and danish, the liaisons met with Governor

Theresa Early and special guest Frank Morgan, Second Vice-President of the MAA. They exchanged ideas on MAA operations then adjourned to the Business Meeting whose minutes appear elsewhere in the newsletter. Of course, the heart of the meeting were the papers presented in the numerous sessions. Four special sessions looked at Distance Learning, the Digital Library, Project NEXT, and Research on the Mathematical Education of Undergraduates. Students presented research in talks and a poster session. The variety attests to the vitality of section members. For more pictures of the meeting see **Scenes from the Meeting** at the end of the newsletter. Virginia Watson

## EMORY UNIVERSITY Department of Biostatistics

and public health sciences in management and processing of public health data, information, and knowledge supporting effecscience disciplines, and analytical epidemiology. Public Health Informatics combines computer science, information science tive public health practice. proficiency in biostatistics, computerized data management and analysis, statistical consulting in biomedical and other healthviduals with a strong background and interest in the mathematical and biological sciences. Biostatistics programs emphasize degrees in Biostatistics and the MSPH degree in Public Health Informatics. The biostatistics curriculum is designed for indi-The Graduate Program: The Department of Biostatistics offers programs of study leading to the MSPH, MPH, MS, and PhD

ety promotes challenging research and career opportunities for students. The Biostatistics Consulting Center provides graduate students training in consulting. Excellent computing facilities are available. of Emory University, Emory's Medical School, the Georgia Department of Human Resources, and the American Cancer Sociulty members who are also committed to excellence in teaching. Our student-teacher ratio is small and conducive to close mentor relationships between students and faculty. Close collaboration with the Centers for Disease Control, the Carter Center The Department: The research-oriented faculty consists of 14 full-time doctoral-level scientists and 19 associate/adjunct fac-

631-acre campus. Its student body of 11,300 men and women includes 5,200 graduate and professional students The University: Emory University is a private, nationally recognized teaching, research and service university located on a

employment as a teaching assistant or a research assistant are available on a limited basis. Health has a small number of fellowships available for the MSPH and MPH degrees. In addition, opportunities for part-time least \$13,790 for 12 months, are available for highly qualified students in the PhD program. The Rollins School of Public Financial Support: Graduate School of Arts and Sciences student fellowships, which provide full tuition and a stipend of at

Additional Information: Senior Program Associate, Department of Biostatistics, Emory University, Atlanta, GA 30322, telephone 404-727-3968, e-mail admit@sph.emory.edu, or www.sph.emory.edu/hpbios.html.

### Section Business Meeting March 31, 2001



The Business Meeting was called to order by Section Chair Bob Fray at 8:30 am on Saturday, March 31, on the campus of Huntingdon College. The Chair reported that registration at the meeting was in excess of 300 and extended the thanks of the Section to Huntingdon College for their hospitality.

Bob Fray conducts the Business Meeting.

Governor Theresa Early reported on several items at the national level affecting the Section. She indicated that membership dues will increase about 3.5% for 2002. Also on the financial front, money from the Exxon Education Foundation grant for MAA's Project NExT will run out in about a year. The MAA is looking to other sources to continue this valuable program. As part of this effort, the Governor issued a call for donations to the MAA in support of Project NExT. Governor Early also reported on a new MAA Professional Development Program, NSF-funded Grant Writing Workshops, the American Mathematics Competitions and the 2001 International Mathematical Olympiad in Washington, D.C., the new Journal of Online Mathematics, and issued an invitation to MathFest 2001 at Madison, Wisconsin, in August.

Newsletter Editor Virginia Watson reported that the Executive Committee had approved the inclusion of position ads in the Newsletter, starting with the fall, 2001, issue. She also noted deadlines of October 15 (fall issue) and March 15 (spring issue) for advertisements and submissions to the Newsletter.

Secretary-Treasurer Stephen Davis presented a financial report. For August 1, 1999 through July 31, 2000, the Section experienced a deficit of \$1663. Major expenses (\$8400 of \$9800) are photocopy costs for the newsletter and the spring meeting program and postage. Primary income sources (\$6700 of \$7700) are ad income for the newsletter, the MAA subvention to the Section, and net meeting receipts from the 2000 meeting at UNC-Charlotte. Since August 1, 2000, the Section has a deficit of \$2174, though anticipated income for newsletter ads and the receipts from this meeting, combined with lower expenditures for postage should significantly offset that deficit. The Section's bank balance at the time of the meeting was \$4590.54, with another \$1400 remaining on a balance to

fund Section Project NExT activities.

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

--Resolution #1--

The Southeastern Section of the Mathematical Association of America expresses warm appreciation to the Department of Mathematics at Huntingdon College, and to the administration of Huntingdon College, for providing excellent facilities for the 80th 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.

Local Hosts: Grady Bullington, Anthony Carlisle, Bob Robertson, Sid Stubbs, Joe Wimbish

Maintenance & Food Services: Martha White, Matt Brandau, Alyssa Phillips

Student Volunteers: Ryan Close, Robyn Minor, Jennifer Wilson, Robert Moore, Laura McCauley, Hanna McGehee, Emilia Lusnia, Stephanie Porter, Leah Harris

--Resolution #2--

The Southeastern Section of the MAA expresses warm appreciation to the following companies for their informative and attractive displays presented at the 80th annual meeting:

Casio

W. H. Freeman & Co.

Key Curriculum Press

**Texas Instruments** 

We also thank these companies for their generous financial support, enabling the refreshments 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 80th annual meeting:

Gary Kader and Mike Perry, Activities for Introductory Statistics Courses

William Bauldry and Lawrence Moore, *Grant Writing* 

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:

Bob Fray, Chair Ray Collings, Chair-Elect Martha Abell, Georgia State Director Daniel Flath, Section Lecturer 1999--2000 Andrew Granville, Section Lecturer 2000--2001

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

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Theresa Early, Chair of the Nominating Committee, presented the following slate of nominees:

Vice-Chair for Two-Year Colleges: Patty Monroe, Greenville Tech Section Lecturer: Robert Bryant, Duke University Vice-Chair for Programs: Joe Wimbish, Huntingdon College AL State Director: Jeff Dodd, Jacksonville State University GA State Director: Sabrina Hessinger, Armstrong Atlantic State University NC State Director: Bob Bernhardt, East Carolina University SC State Director: Subhash Saxena, Coastal Carolina University TN State Director: Doug Hardin, Vanderbilt University

(Note: incumbents are Patty Monroe, Joe Wimbish, Jeff Dodd, Bob Bernhardt, Subhash Saxena, and Doug Hardin.) No further nominations were made from the floor and the slate was elected by acclamation.

David Royster, reporting for the Site Selection Committee, announced invitations from Clemson, Coastal Carolina, Winthrop, and Wofford Universities to host the 82nd meeting in 2003. The committee moved that the meeting be at Clemson University, to be held jointly with the SIAM Southeastern Region. The committee's recommendation was approved without dissent.

Chair Fray followed with comments on several topics. He noted that the Section Lecturer, whose term ends with his/her presentation at the annual meeting, continues to be available for the following academic year. Departments are encouraged to take advantage of opportunities to invite retiring Lecturer Andrew Granville to their campuses next year. The Chair echoed the Governor's invitation for Section members to attend MathFest. Finally, he highlighted the meeting next year at Georgia Tech. This will be a joint meeting with the AMS Southeastern Section (which, in addition to the five states of our Section, also includes West Virginia, Kentucky, Louisiana, Florida, and Virginia). He issued a call for contributions to this meeting, including ideas for special sessions, short courses, and activities. (These can be made through any of the members of the Executive Committee.) Preparations for this meeting have included an extensive and detailed agreement with officers of the AMS in what will surely prove to be a model to the MAA for such cooperative meetings. Attendance is projected in excess of 600, and preliminary announcements and registration will be handled through the AMS. As such, prospective speakers should note that deadlines for proposals of talks will be firm.

Bob Fray concluded with the introduction of his successor, Ray Collings, who assumes the position of Chair at the conclusion of the meeting. Prof. Collings thanked all for their efforts on behalf of the Section, and issued an invitation to the 81st annual meeting of the Southeastern Section at Georgia Tech on March 8-10, 2002.

### News from the States



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

The 6th Annual Alabama State Dinner Meeting was held at the University of West Alabama in Livingston, Alabama on Friday, February 16, 2001. A record 50 people attended the dinner this year to hear Professor Joe Albree of

Auburn University at Montgomery present a talk entitled "The Archimedes Palimpsest". The talk was very well received. It was both entertaining and scholarly, relating the exciting discovery of this ancient manuscript containing the work of Archimedes in the context of a nice general introduction to the kind of thinking and investigation that go into constructing the history of such manuscripts. As is the tradition in Alabama, this meeting was followed the next day (Saturday, February 17) by the 51st annual conference of the Alabama Association of College Teachers of Mathematics (AACTM). This year, the conference's sole invited lecture, the Lewis -Parker Lecture, was delivered by Jack Brown of Auburn University, who spoke on "Mathematicians in Industry -Experiences of One High-tech Migrant Worker".

Other prominent activities at Alabama's university mathematics departments included the yearly NSF funded summer workshop "Research Experiences for Undergraduates in Discrete Math and Computer Algebra", run by Overtoun Jenda and Peter Johnson out of the Department of Discrete and Statistical Sciences at Auburn University and the yearly Alabama Statewide Mathematics Contest, a contest for high school students directed by Jeff Dodd of Jacksonville State University (http:// mcis.jsu.edu/mathcontest) with the help of faculty at many of Alabama's universities.

On a sadder note, Jack Brown has contributed for this news article the following report: "Dr. Ben Fitzpatrick, Jr., passed away on Saturday, Nov. 11, 2000. Ben earned his BS in Mathematics at Auburn University in 1952. After a period working in the aerospace industry, he earned his Ph.D. at the University of Texas (under H. J. Ettlinger) in 1958 and returned to Auburn as an Assistant Professor in 1959. He served as Head of the Department of Mathematics from 1978 to 1983 and also served a term as Chair of the Auburn University Senate. He retired from Auburn in 1992 and then served on the faculty of University of the Incarnate Word

from 1992 to 1996. He spent the past four years as an active Professor Emeritus at Auburn with an office in Parker Hall and he was actively involved in the Legacy of R. L. Moore Project and the Discovery Learning Project at the Educational Advancement Foundation in Austin, Texas. Faculty in the Department of Mathematics honored his memory with a "Ben Fitzpatrick Memorial Weekend" Feb 9-10, 2001, consisting of a Memorial Topology Miniconference followed by the Ben Fitzpatrick Remembrance Gathering. Speakers at the Memorial Topology Conference included Mike Reed, Judy Kennedy, A.V. Arhangel'skii, Tom Ingram, Bob Stephenson, Peter Nyikos, Bill Mahavier, Alan Dow, Hao Zhou, Bob Heath, Jerry Vaughan, Mary Ellen Rudin, Paul Gartside, Oleg Pavlov, Dennis Burke, Jan Dijkstra, Stoyu Barov, and Chuck Hagopian. There were approximately 175 Friends of Ben at the Remembrance Gathering. Ben's nephew, Young Ben, has established a website http://www. benfitzpatrick.org in honor of Ben. You might want to visit that site or even contribute one of your favorite memories of Ben to the site. Information on the establishment of the Ben Fitzpatrick Graduate Fellowship in Topology is also available at that site."



### **G** eorgia: Martha Abell, State Director, Georgia Southern Statesboro, GA 30460-8093.

email: somatla@gsvms2.cc.gasou.edu.

The 2000-2001 academic year has been a busy one at institutions around the state. Conferences were held at many. Valdosta State University hosted its sixth annual Mathematics

Technology Conference with an invited address, "Fractals: A Subject Made Possible by the Computer," delivered by Dr. James Keesling of the University of Florida Mathematics Department. Georgia Perimeter College (formerly DeKalb College) also had another successful conference as did Columbus State University. Many schools also hosted mathematics tournaments. Columbus State hosted its twenty-seventh annual tournament through the sponsorship of Total Systems Inc. and the CSU College of Science. In addition, Georgia Southern University hosted its thirteenth annual event for middle school and high school students in the southeastern region of the state, and Albany State University held a math tournament for high school students in surrounding counties.

Georgia Tech's Faculty Development Program continues to benefit faculty at University System institutions who choose to spend a semester or two involved in research with the faculty at Georgia Tech. This year's participants came from North Georgia College and State University, Southern Polytechnic and State University as well as Columbus State University. The University of Georgia was a recipient of a National Science Foundation Grant for Vertical Integration of Research and Education in the Mathematical Sciences (or VIGRE). The money will primarily fund more research time for graduate students, increased research opportunities for undergraduates and more postdoctoral fellowships for the department.

The MAA Ge orgia State Dinner was held on April 21, at Mercer University in Macon, GA. Dr. Gary Gruenhage, a set-theoretic topologist at Auburn University, was our speaker. A volunteer for a site for the 2002 meeting is requested. Host institutions receive funding from the MAA to assist in holding the meeting. Of course, we look forward to having the 2002 Spring Meeting of the Southeastern Section of the MAA in Atlanta.



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

Appalachian State University is hosting a state dinner on April 19th, in combination with a mini-conference on graphs, combinatorics, and computing on April 20th. The Guest speaker is Dr. Bob Panoff, President and Executive

Director of the Shodor Education Foundation, Inc. The title of his talk will be "How Mathematics Helped Me Fall in Love with Physics".

Duke University reports that the Duke team of Jonathan Curtis, John Clyde and Kevin Lacker finished first in the 2000 Putnam competition. This was Duke's third win since 1993. Another team of Duke students: Sam Malone, Carl Miller and Daniel Neill, were named *outstanding* in the COMAP sponsored Math Contest in Modeling. This is the fourth straight year Duke has had a team place in the *outstanding* category in this competition.

Guilford College reports that James Robert (J. R.) Boyd, Jr., Professor of Mathematics Emeritus, died on Wednesday, March 14, 2001. J. R. taught mathematics at Guilford College from 1961 until 1991. He founded the *Journal of Undergraduate Mathematics* in 1969. At least eleven of his students went on to receive a Ph.D. in mathematics.

The Department of Mathematical Sciences at UNC-Greensboro received

an NSF grant for \$200,000 to support student scholarships of \$2,500 each over a two-year period to academically talented students pursuing degrees in computer science or mathematics; 40 students were recently awarded these scholarships.

Wake Forest University reports that this year's Gentry Lectures will be given by Andrew Granville on April 5th and 6th.

The NC Council of Teachers of Mathematics sponsors an annual State Mathematics Contest every spring; regional sites include 16 universities, colleges, and community colleges throughout the state.



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

The South Carolina MAA State banquet was held on Friday the 9th of February, 2001 at Coastal Carolina University. The keynote speaker was Dr. John Kenelly who made a presentation on "*Now that Machines do* 

*Mathematics, What do Math Teachers Teach?*" It was quite a thought provoking talk. The Friday evening schedule gave an opportunity for some to have a weekend vacation at Myrtle Beach. The number of participants was fifty. It included several students, and four faculty from the UNC-Wilmington (North Carolina). Their participation was appreciated.

Coastal Carolina University also hosted a SIAM conference (March 16-17). The Math Contest took place on March 30, with approximately 250 students from 24 schools statewide (one faithful school from Kingsport, TN comes year after year). The 74th annual meeting of the South Carolina Academy of Sciences will take place at CCU (April 5-6).

Columbia College held its first Mathematics Day for high school girls on March 31, 2001. Activities for the day included hands-on sessions on robotics, computer applications, building kites, modeling with real data in a calculator-based laboratory, and games and problems solving. There were also sessions on women in the history of mathematics and Pythagorean triples. During lunch, Ms. Toni Moore, an information systems engineer from Blue Cross Blue Shield, spoke about mathematics in business and industry. Competitions included a written math test, paper airplane, bridge building and a team competition. Columbia College receives a CCLI NSF grant for a robotics and multimedia laboratory. This grant also provides funding for the PI, Nievs McNulty, and co-PI Madelein Schep to develop teaching modules for robotics and multimedia. In February, Dave Trautman of The Citadel, hosted the department's annual mathematics competition for high-school students. At Level I, Adam Carson of Summerville won the first prize, a \$70 gift certificate to Citadel/Northwoods Malls. Matt Lord of Stratford took second prize, a \$35 gift certificate, while Richard Underwood of Goose Creek and Jonathan Tomberg of Stratford tied for third place and each received a \$20 gift certificate. At Level II, Philip Kurian of Academic Magnet edged out Don Underwood of Goose Creek by one point. (The prizes are the same in Level II as in Level I). Joel Evans of Stratford hung on to take third place.

### Tennessee: Doug Hardin, State Director, Vanderbilt University, Nashville, 37240-0001. email: hardin@math.vanderbilt.edu.

The Second Annual TN State Mathematics Dinner will be held 6:00-9:00 p.m. on Thursday, 3 May, 2001 at the Holiday Inn Vanderbilt. Professor James Herod (Georgia Tech, Emeritus) will be the speaker for the evening. Professor Herod will address the question: "What can be done with the biology students?"

There will be time to meet old friends, to make new ones, and to discuss common concerns. All are invited whether or not they are members of the MAA. Spouses or guests are welcome and encouraged to come. We promise to finish by 9:00 p.m. The cost for the dinner is \$16 per person (\$10 for students). Please reproduce and use the enclosed form to make your reservation for the dinner. The deadline for dinner reservations is 20 April, 2001. See http://atlas.math.vanderbilt.edu/~hardin/maa for more information and directions. Please mail your reservations and checks (payable to Va nderbilt University) to:

Crystal Martin MAA Dinner SC 1326, Department of Mathematics Vanderbilt University Nashville, TN 37240-0001

### **Student Chapter News**

### Georgia

The students at **Columbus State University** have put together a new home-page (http://math.colstate.edu/MaxClub/) which is entirely edited by the students. Among other things, they have posted the "Problem of the month" there. In their January meeting, they watched the movie about the proof of Fermat's Last Theorem. At another meeting, they listened to Mr. Jeffery Barron speak on the theme of finding a job after graduation with a degree in mathematics. In addition, they are making plans to host a math field day for middle school students in the community.

The Student Chapter at **Georgia Southern University** has had an exciting year as well. During the fall, several faculty members in the department gave presentations on topics such as the lottery and applications of differential equations. In the spring, students presented their work in the national Mathematics Competition in Modeling. Several others presented results obtained through research experiences at Summer REU Programs and the McNair Scholars Program. Club members also assisted with the Annual Georgia Southern University Mathematics Tournament.

Teams of undergraduate students from around the state (and region) recently had the opportunity to participate in a Jeopardy competition at the Southeastern Atlantic Section Meeting of the Society for Industrial and Applied Mathematics (SIAM). This event may be held annually in the future, so student chapter advisors will want to watch for announcements for the 2002 spring meeting to be held at Western Carolina University. For a report of this year's event, see http://www.cs.utk.edu/~berry/seas01/.

### North Carolina

**Greensboro College** has just established a student chapter with fourteen members.

### South Carolina

The **Presby terian College** Student MAA Chapter held its 4th Annual Math Competition on March 21. First place went to Allison Shumpert, second to Beth Cook, and third to Chad Prashad.

### **Scenes From the Meeting**



Project NExTers meet with Ben Klein Friday morning.



Students speak with graduate school representative during TA Rush.



Students from Highpoint University, NC eat pizza.



Vice-Chair Patty Monroe introduces Ted Shifrin.



Ted Shifrin makes a point in his plenary address.



Blaise (yes he's named after Pascal) takes a break from attending talks with his mom Meghan Burke.



Learning about the Digital Library in a special session.



Andrew Granville gives his plenary talk.



Elon College and Salem College students and advisors (far right) are ready to eat barbeque.



Governor Theresa Early (center foreground) presides at the Liaison Breakfast.



Martha Abell (left) and Tim Howard at the Business Meeting.



Frank Morgan begins his talk by blowing bubbles.



The MAA book table is a popular place at the meeting.



Students present their research in the poster session.



Part of Huntingdon's campus green with Flowers Hall in the background.