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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 1-3, 2002	Mathfest 2002, Burlington, VT
January 15-18, 2003	MAA/AMS Annual Meeting, Baltimore, MD
March 21-22, 2003	Joint Southeastern Section MAA and Southeastern Atlantic Section SIAM Meeting, Clemson, SC
April 9-12, 2003	NCTM Annual Meeting, San Antonio, TX
July 31– Aug. 2, 2003	Mathfest 2003, Boulder, CO
January 7-12, 2004	MAA/AMS Annual Meeting, Phoenix, AZ
March 12-13, 2004,	Southeastern Section MAA Meeting, Clarksville, TN
April 21-24, 2004	NCTM Annual Meeting, Philadelphia, PA
August 12-14, 2004	Mathfest 2004, Providence, RI
January 5-8, 2005	MAA/AMS Annual Meeting, Atlanta, GA
April 6-9, 2005	NCTM Annual Meeting, Anaheim, CA
Summer 2005	Mathfest 2005, Albuquerque, NM
January 12-15, 2006	MAA/AMS Annual Meeting, San Antonio, TX
April 26-29, 2006	NCTM Annual Meeting, Kansas City, MO
January 4-7, 2007	MAA/AMS Annual Meeting, New Orleans, LA
March 21-24, 2007	NCTM Annual Meeting, Atlanta, GA



### From the Editor

The joint meeting with the Southeast Regional AMS was a success. Unfortunately, I missed the meeting because a virus hit me at the same time the mathematicians hit Atlanta. Section Historian Joe Albree writes about the extensive preparation for the meeting in *Historic Meeting* on page 12.

In 2003, the section will meet jointly with the Southeastern Atlantic Section of SIAM. The Fall 2002 Newsletter will have a special pullout section with all the meeting details.

As is customary, the nomination form for the 2003 Award for Distinguished College or University Teaching of Mathematics appears in the center of the newsletter. Consider nominating someone for this honor.

In the Spring 2001 Newsletter, Governor Theresa Early wrote about the enhancement of American Mathematics Competitions programs through a generous contribution from the Akamai Foundation. Many are not familiar with these programs. This issue gives a description of the different programs offered by AMC.

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

### Virginia Watson

### From the Chair



Spring is a wonderful time to celebrate. Thanks for reading this newsletter and thus sharing in the satisfaction and joy of your colleagues' accomplishments. We can tend to be a bit tired this time of year, so I hope you are energized in reading the good news of our Southeastern Section of the MAA.

Thanks to all who planned and attended the joint AMS/MAA section meeting at Georgia Tech on March 8-10, 2002. The AMS team lead by John Bryant, along with the MAA Section Officers and the site organizers led by Richard Duke, were rewarded by nearly 700 participants and over 400 papers or lectures. Our historian, Joe Albree, wrote and distributed a paper on this historic meeting's development and roots in other joint meetings. Should you like a copy, e-mail Joe at joe2@strudel.aum.edu. (*Editor's note: a copy of the article appears on page 12.*)

Our next meeting on March 21-22, 2003, at Clemson University features another partnership, this time with the Southeastern Section of SIAM. An applied theme will be evident throughout our two days together. Our plenary lectures include the president-elect of MAA, Ron Graham (University of San Diego & formerly Bell Labs), as well as John Baxley, our newly elected section lecturer from Wake Forest University, and our newest teaching award recipient, Ronald Harshbarger from University of South Carolina-Beaufort. Our call for papers and preliminary meeting announcement will again be a pull out in the Fall 2002 Newsletter, so we encourage all of you to help us towards our precedent of 400 talks!

Have a great summer. I'll be teaching three courses, graduating a daughter from high school, and getting off to the MAA MathFest in Burlington, VT. I know you'll be busy too, and hopefully many events will be memorable for each of us. If you are passing through Atlanta, send me an e-mail (rcolling@gpc.edu) or give me a call (Office 404-299-4210 or Home 770-736-0762) and let's get together for a Coke (what else!) or a meal. I look forward to our next time together, however and whenever it may happen.

**Ray E. Collings** 

### 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.

**John Baxley** of Wake Forest University is the 2002-2003 Section Lecturer. He is available for the next two academic years. Contact him at baxley@mthcsc.wfu.edu. Possible talks include:

- Infinite Series and How They Grow (E\* or I)
- What's the Value of the Mean Value Theorem? (I)
- Variations on Weierstrass' Approximation Theorem (I)
- Boundary Value Problems for Ordinary Differential Equations (I or A)
- Homicide Detectives and Differential Equations (I or A)
- A Simple Model for the Spread of Sexually Transmitted Diseases (A)

**Robert Bryant** of Duke University was the 2001-2002 Section Lecturer. He is still available for the 2002-2003 academic year. Contact him at bryant@math.duke.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

Congratulations to our own John Kenelly who was elected Treasurer of the MAA by the MAA Board of Governors at its January meeting. John has been an asset to the MAA in diverse areas over the years and the organization will certainly benefit from his service as Treasurer.

The better I get to know my way around the national organization, the more convinced I become that our section is under-represented on national MAA committees. I would really like to push to have more members of our section serving in these important positions. To do that, I need your help. If you are interested in serving on a national committee, please let me know. But I need more than just your name. The national committees are broken into categories: Awards, Competitions, Education, Human Resources, Meetings, and Publications. Let me know in which category you think you could make a contribution and why. I look forward to seeing more of us on these committees.

Project PREP, Professional Enhancement Programs, partially funded by the NSF and directed by the MAA, has been very successful. The six workshops offered in the summer of 2001 were essentially fully subscribed with an average enrollment of just over 20 participants per workshop. The program is offering seven very interesting workshops this summer:

- Presenting Mathematical Masterpieces and Powerful Techniques of Effective Thinking to Non-Science Students, May 28-31, Univ. of Texas
- Regression Analysis, June 2-7, Oberlin College
- Mathematical Methods and Modeling for Secondary Mathematics Teacher Education, June 23-28, Lewis & Clark College
- Explorations in Finite Mathematics: A Modeling Approach with Computers, June 23-28, Delaware State
- Teaching Future High School and Middle School Teachers, June 9-20, Univ. of New York, Potsdam

(Continued on page 8)



### Spring Executive Committee Meeting

The spring meeting of the Southeastern Section Executive Committee was held Thursday evening, March 7, 2002, on the campus of Georgia Tech, following dinner with Project NExT-SE participants. The Committee was joined by AMS Associate Secretary John Bryant

and by local host Richard Duke of Georgia Tech. The meeting opened with a brief overview of the imminent Section meeting, and expressions of mutual appreciation from Ray Collings, John Bryant, and Richard Duke of the MAA, the AMS, and Georgia Tech, respectively, for the hard work and cooperation that produced the Joint MAA-SE and AMS-SE meeting. These sentiments were echoed by Past Chair Bob Fray who expressed thanks to the meeting organizers.

Vice-Chair Patty Monroe reported on efforts to encourage two-year college participation at the Clemson meeting next year. The Secretary-Treasurer presented a financial report (see the minutes for the Section business meeting). Governor Theresa Early reported on MAA activities and news at the national level (also echoed in the business meeting minutes). John Harris, Project NExT-SE coordinator, shared a schedule of the NExT-SE program for March 7-8. We are welcoming a new class of fellows this spring. State Directors reported on activities in their states, highlighted by annual State Dinners in each state. Reports were also received from the Nominations and Site Selection Committees; these were relayed to the membership at the business meeting on March 9. The Distinguished Teaching Award recipient Ronald Harshbarger of the University of South Carolina at Beaufort and the Distinguished Service Award recipient Sharon Cutler Ross of Georgia Perimeter College were announced.

Under Old Business, the Committee revisited two related issues: our recent financial deficits and mailings to Section membership. The need for the annual meeting to be self-supporting will likely indicate that registration fees for the meeting will not fall back to the same level that we had prior to this joint meeting. The inclusion of the meeting announcement and short course registration as separately colored inserts in the fall newsletter was applauded and will be repeated next fall. This eliminates one membership-wide mailing. Increasing the visibility of the annual meeting near to the meeting date remains a concern. The Committee endorsed pushing an email reminder to the membership one month prior to

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the meeting, and a single-sheet paper mailing with meeting highlights will be sent 4 to 6 weeks before the meeting (estimated cost approximately \$900). For new business, the Committee passed a resolution of congratulations for John Kenelly on his election to national office as MAA Treasurer.

### **Stephen Davis**

(From the Governor Column, continued from page 6)

- Leading the Academic Department: A Workshop for Chairs of Mathematical Sciences Departments, June 27-30, Towson, MD
- Knot Theory, June 24-28, Wake Forest Univ.

I encourage you to consider attending one of the workshops. For more information, access Professional Development from the MAA web page and select PREP Professional Enhancement Programs.

### **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, for the third time in four years, the Section's prize goes to Kevin D. Lacker of Duke University. Congratulations also to Duke's team of Kevin Lacker, David Arthur, and Nathan Curtis, which finished as the third highest ranking team in the 2001 Competition.



**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/.

### **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 8093 Statesboro, GA 30460-8093

### Harold Reiter recipient of 2002 Paul Erdös Award



The World Federation of National Mathematics Competitions has named Harold Reiter of the University of North Carolina Charlotte as a recipient of the 2002 Paul Erdös Award. The Paul Erdös National Award was established to recognize contributions of mathematicians that have played a significant role in the development of mathematical challenges at the national level and that have been a stimulus for the enrichment of mathematics learning. For

more information about the award please see the website at http://www.amt.canberra.edu.au/wfnmcaw.html. The award will be presented at the organization's conference this summer in Melbourne. Harold Reiter was the Section's 1997 Distinguished Teaching Award recipient. (*Editor's note: Professor Reiter is involved in the American Mathematics Competitions, see the article on page 34.*)

### New Class of Project NExT-SE Fellows

Michelle Foster, Wingate University

Gerald Marshall, TriCounty Technical College

Mohammed Amer Qazi, Tuskegee University

Sharon Sullivan, Catawba College

Yan Wu, Georgia Southern University

The fourth class of Project NExT-SE Fellows had its first meetings on March 7<sup>th</sup> and 8<sup>th</sup>, just prior to the Section Meeting in Atlanta. The program included sessions on undergraduate research, the grant proposal process, career management, and innovative classroom ideas.

The Section welcomes this great new group of Fellows!

### **HISTORIC MEETING**

This weekend's AMS and MAA Spring Southeastern Sectional Meeting is full of superlatives. The largest number of mathematicians and mathematics educators (in the neighborhood of 600) ever to assemble for a sectional MAA or AMS meeting in the Southeast will be gathered at Georgia Tech, March 8-10, 2002. There will be approximately 400 papers and lectures, easily another record.

That the MAA and the AMS should join forces to produce a single meeting might seem a natural undertaking. A closer examination revealed that this was far from a trivial project.

### The idea

It all started with the conjunction, to borrow a term from astronomy, of Bob Fray (Furman University) and John Bryant (Florida State University). Bob and John had become close personal as well as professional friends when they served together in the FSU department of mathematics in the late 1960s. When they met at the 1999 Joint Meetings in San Antonio, John had succeeded Bob Daverman (University of Tennessee, Knoxville) as Associate Secretary of the AMS and Bob (who had moved to Furman) had been elected Chair of the Southeastern Section of the MAA. A joint MAA/AMS meeting in the southeast was an ambitious goal they both desired.

John received encouragement from Bob Daverman (who had become Secretary of the AMS) and stayed in contact with Bob Fray. Bob Fray introduced this idea at the Section's Executive Committee meeting in the Fall of 1999. Then, when it was brought up for extended consideration at the 79<sup>th</sup> Annual Meeting of the Section at UNC Charlotte in March 2000, the response was frankly ambivalent. Many hurdles were pointed out. Discussions were led by Ray Collings (Georgia Perimeter College, Chair-Elect), Stephen Davis (Davidson College, Treasurer), Joe Wimbish (Huntingdon College, Program Chair), and Tina Straley (MAA Executive Director, formerly Southeastern Section Chair). The result of these deliberations was a long and now historic email memo composed by Stephen Davis in which most of the practical problems were spelled out in detail.

### Challenges

With its emphasis on professional research in pure mathematics and as the older organization, the AMS is a *national* society that holds national meet-

ings, most of which are located regionally. On the other hand, with its blend of interests in collegiate mathematics and mathematics education, the younger MAA is a federation of rather *independent* regional and state sections, and within a certain framework, each section conducts most of its own affairs. Getting both of these horses into the same harness has taken considerable work!

The Southeastern Section of the MAA encompasses colleges and universities in North and South Carolina, Georgia, Tennessee, and Alabama; the Southeastern Region of the AMS includes all of this, plus institutions in Virginia, West Virginia, Kentucky, Florida, Arkansas, Mississippi, and Louisiana. AMS meetings consist of sessions of papers in specialized fields organized by research professionals, and the whole program is managed by the national AMS office in Providence, RI. On the other hand, MAA meetings consist of an eclectic mixture of contributed papers that are organized by the Section's Program Chair. Pure mathematics is just one feature of Southeastern Section MAA meetings; papers and poster sessions by undergraduates, and the concerns of mathematics teaching have also been included since the earliest days of the Section in the 1920s. And now, the MAA conducts Short Courses, has a Project NExT program, and hosts TA Rush, among other activities. The usual practice of AMS members is to sit through the whole session in which they are interested, whereas it is common for MAA members to move about from session to session, sort of a la carte, as they select individual papers to attend.

### The preparation

In order to explore in depth the feasibility of the AMS and the MAA joining forces to produce a joint southeastern meeting, Richard Duke (Local Arrangements Chair, Georgia Tech) hosted a planning meeting on August 25, 2000. After examining the challenges carefully, the people at this meeting (Bob Fray, Ray Collings, Stephen Davis, Joe Wimbish, John Bryant, and Richard Duke) decided that the problems delineated in Stephen Davis' memo were indeed tractable. These people would be responsible, over the next year and a half, for hammering out most of the details required to make the first notions of a collaboration into a truly joint meeting.

Using Stephen Davis' memo and with inputs from John Bryant and his colleagues at the AMS, Bob Fray composed a succession of *Agreements* in which the operational issues and details were spelled out. Here are a few of the highlights.

(Continued on page 23)

### Sharon Cutler Ross Receives Section Distinguished Service Award

*Ray Collings, chair of the Southeastern Section, made the following remarks upon presenting the award at the March 8, 2002 Awards Presentation.* 

Our 2002 Service Award winner has been active amongst us for 32 years. Her service in the Southeastern Section has included interesting and varied talks as seen in the following sampling:

- Mobile, Alabama, 1976, Modules over Discrete Valuation Rings
- Boone, North Carolina, 1980, A Mathematical Model for Tooth Replacement
- Greenville, South Carolina, 1988, Mathematics as an Experimental Science
- Knoxville, Tennessee, 1989, Using the HP-28S in Precalculus & Calculus
- Davidson, North Carolina, 1990, Students Experiments in College Algebra
- Charlotte, North Carolina, 2000, Thoughts on Teaching Proof Writing

The business of our large, multi-state section, is no small task. Our award winner has served us well from 1982-1990 in the elected section office positions of Vice Chair, Chair-Elect, Chair and Past Chair.

Our awardee has shown our colleagues nationwide that the southeastern section leads the way. A snap shot of her talks include the following:

- Louisville, KY, 1990, EMPE: Birth of a New Prognostic Testing Program
- San Francisco, CA, 1991, Faculty Preparation for a Technologically Active Curriculum
- Burlington, VT, 1995, Constructing a Modern Calculus Course

Facilitating the business of our profession at the national level, our awardee served on ten national MAA Committees over 11 years. She was elected to the national office of Second Vice President from 1992-1994. Our section is proud to be so well known and represented throughout the structure of the association. It is a wonderful privilege and honor, both (Continued on page 17)

### Ronald Harshbarger Recipient of Section Distinguished College or University Teaching Award

Ben Klein, chair of the Section Teaching Award Committee, made the following remarks upon presenting the award at the March 8, 2002 Awards Presentation.

Most of us are aware that Hilton Head Island, South Carolina, attracts hordes of folks to its shores for beaching, relaxing, playing tennis, fishing, golfing, and even watching golfing. But the MAA selection committee learned this year that during the last six years there has been another island attraction. Dr. Ron Harshbarger has been attracting all manner of undergraduates who bring their mathematical angst to his classes and learn to deposit it at the door and begin the process of, if not appreciating the beauty and logic of mathematics, at least understanding its basic structures and functions.

Please understand that Dr. Harshbarger does not have the luxury of teaching mathematics majors, who arrive with enthusiasm for and understanding of the subject. No, Dr. Harshbarger teaches college algebra and the freshman calculus sequence over and over again. In fact, he teaches all the University of South Carolina Beaufort mathematics offerings over and over and over without losing his edge, without losing his passion, without losing his patience. Students find him rigorous and accessible, knowledgeable and open to questions. They say things like "Best math teacher I have ever had," "...went way out of his way to help," "Teaching and mathematical ability are fantastic." "...best teacher on campus," "...puts students first," "... objective and fair," "Highly motivated and dynamic teacher ...," "He has been very instrumental in my overcoming fears about math." "I have never really understood algebra until Dr. Harshbarger taught me." "I was having a very hard time, but Dr. Harshbarger would not let me give up. He helped me outside of class until I had adjusted to my new home and the difficult course material." and best of all: "Dr. Harshbarger makes math understandable to an arts-minded student."

From peer evaluators who have visited his classes, we learned that he uses instructional aides with ease, eradicates mathematical angst with humor and warmth, and coherently presents both the theoretical and applicable aspects of the mathematical concepts under consideration. One careful observer noted that he equalized learning opportunities for students of varying backgrounds and abilities by approaching each problem in a number of ways, including cooperative learning techniques.

Encouraging faculty and students to incorporate the use of the graphics calculator in the study of mathematics at all the levels, Dr. Harshbarger combines a clear understanding of the benefits that technology can provide with a rare instinct for integrating it into the learning process. He teaches all the mathematics courses offered at the University of South Carolina Beaufort with technology and has had great success in the classroom. A departmental colleague summed up Dr. Harshbarger's approach to teaching mathematics in the following way: "Most college students, in a sense, need a translator to aide them in their transition from mathematical symbolism to conceptual understanding and a feel for the practicality of mathematical ideas. Dr. Harshbarger gives a vivid and lively translation indeed!"

Early on Dr. Harshbarger responded to the special needs of under-prepared mathematics students in their initial mathematics courses by designing manuals to assist his students and those in other sections. Good writing is a rare attribute for a professor of mathematics, but it is his ability to write clearly, concisely, coherently and engagingly that makes him a very successful writer of teaching aides and mathematics texts. No matter the topic, one is struck by his ability to be thorough without being redundant or wordy, to be logical without being pedantic. During his tenure at the University of South Carolina Beaufort, Dr. Harshbarger has continued his well-established record as a textbook author and as a presenter at regional and national meetings of the most significant mathematics associations and societies. Clearly he has avoided burnout as an instructor at least in part by staying current with pedagogical innovations and technological applications for the classroom. He is currently writing his twenty-first text and has presented fourteen papers on technology and teaching mathematics in the last four years.

During a long and highly successful career at Penn State University, where he received both teaching and advising awards, Dr. Harshbarger taught every undergraduate course in mathematics offered by the University and numerous graduate courses as well. At Georgia Southern University, he taught a wide variety of undergraduate and graduate courses in mathematics. He developed five new mathematics courses and the mathematics component for a new D.Ed. degree at Georgia Southern. Since 1996, students and faculty at the University of South Carolina Beaufort and the University system as well have benefited greatly from having Dr. Harshbarger as a Professor of Mathematics. The fact that he is an excellent faculty member is now pretty much a unanimous decision. In 1999, Dr. Harshbarger was named Professor of the year at the University

of South Carolina Beaufort. In 2000, Governor James Hodges named Dr. Harshbarger the Governor's Professor of the Year for South Carolina. In 2001, the University of South Carolina Board of Trustees named him the Carolina Trustee Professor of the Year, selected from faculty of the seven non-Columbia campuses of the University. I am pleased to announce today that the Southeastern Section of the Mathematical Association of America is following in what appears to be a tradition by conferring upon Professor Ronald J. Harshbarger the 2002 Mathematical Association of American Southeastern Section Award for Distinguished College or University Teaching of Mathematics.

(Service Award continued from page 14)

professionally and personally, for me to present the 2002 Southeastern Section Mathematical Association of America Service Award to Sharon Cutler Ross.

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

### **Special Pullout Section**

Joint Meeting Southeastern Section MAA and Southeastern Atlantic Section SIAM

> Clemson, SC March 21-22, 2003

See Fall 2002 Newsletter

### CALL FOR NOMINATIONS for the 2003 Award for Distinguished College or University Teaching of Mathematics

Nominations for the 2003 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 2003 meeting of the Section at Clemson 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 November 1, 2002.

Nomination packets for persons nominated for the 2002 award may be carried forward for consideration for the 2003 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, Univ. of South Carolina, Beaufort

# **Eligibility Requirements and Guidelines**

### Each nominee

year colleges) whose assignment during the current academic year is at least half time. (Teachers on approved sabbatical leaves 1 – must be a teacher of mathematical sciences at a public or private college or university in the US or Canada (including two

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\*.

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

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).

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

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

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

# 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 n	lathematical 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.

Name of nominator (first name first):	
Address of nominator:	
Telephone: E-m	ail:
Nominator's Signature:	Date:

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.

ner'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. The winner of the Southeastern Section Award will be the Section's nominee for the national Haimo Award, and since the win

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

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 profession

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

## The Procedure

Send a complete packet by November 1, 2002 to the chair of the selection committee:

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

\* To devise a way for the varied and multifaceted MAA program to fit *(Historic Meeting continued from page 13)* 

into the AMS program template. In particular, to encourage members of the MAA to organize at least some special sessions, and on the other hand, to allow general contributed paper sessions in an AMS setting.

\* To invite and sponsor plenary speakers who would be attractive to and supported by both the AMS and the MAA. As a part of the cooperative arrangement, it was decided *not* to specify any of the invited speakers as MAA or AMS lecturers, *per se*, that is, to make them joint invited lecturers, period.

\* A compromise registration fee was agreed upon. Furthermore, the MAA relinquished its local control of the registration and other financial matters. Donna Salter (AMS office, Providence, RI) worked with Stephen Davis to specify and share the registration and printing costs, the expenses of the plenary speakers, and Georgia Tech's expenses to host this very large meeting in such a way that the MAA would at least break even financially and the AMS financial guidelines and practices would not be violated.

A key meeting was held at Georgia Tech in the Summer of 2001 to solidify most of these special arrangements. In addition to the usual advance publicity of the meeting on the AMS website and in the *Notices*, the MAA Southeastern Section *Newsletter* for Fall 2001 published a special insert announcement and advertisement written and produced, with help from Ray Collings, by Virginia Watson (*Newsletter* Editor, Kennesaw State University). On January 18, 2002, Joe Wimbish and John Bryant met in Tallahassee and spent a day putting the program of lectures, sessions, papers, short courses, and other features that we will enjoy into its final form.

### But not quite the first

In 1975 and 1977, the Southeastern Section of the MAA held its 54<sup>th</sup> and 56<sup>th</sup> Annual Meetings (at the University of South Alabama and the University of Alabama in Huntsville, respectively) on the Friday and Saturday immediately following the 721<sup>st</sup> and 743<sup>rd</sup> meetings, respectively, of the AMS, which were held on Thursdays. In 1977, a \$3.00 registration fee allowed one to attend both meetings. Other than this, there were no formal efforts made to conduct joint meetings at these times and the practice ceased.

The first joint annual meeting of the Southeastern Section of the MAA was organized in conjunction with the Georgia Academy of Science, the Georgia Section of the American Chemical Society, and the Southeastern Section of the American Physical Society. It was held at Agnes Scott College,

### MAA Southeastern Section Newsletter

March 22-23, 1935. There were more than four hundred persons at this meeting, of whom one hundred and fifty-nine registered as mathematicians, and of them, only thirty-seven were MAA members. Here are two sample titles from the thirteen mathematics papers presented: "Movement of Mercury's perihelion by the visiting speaker, K. P. Williams of Indiana University; and Integrating odd powers of sec x by W. V. Parker of Georgia Tech. Unfortunately, I do not have a copy of the full program so I cannot give you any indication of the science, chemistry, and physics papers contributed or other details about the meeting.

### Historic

Yes, mathematics has certainly changed in sixty-seven years! Further, we recall that the Southeastern Section of the MAA was founded at Georgia Tech in 1922, so it is quite appropriate that, eighty years later, Tech host this historic meeting.

It is especially encouraging that persons in our two professional societies in college and university mathematics have had the foresight to combine efforts at this time and place. This enlightened concept has become the reality of our meeting today because of the true cooperation and collegiality of many persons of vision and good will. The organizers and many others hope that this joint meeting and other cooperative endeavors between the AMS and the MAA in the future may indeed be greater than the sum of their parts.

Joe Albree Auburn University at Montgomery March 8-10, 2002

### Section Business Meeting March 9, 2002

The Business Meeting was called to order by Section Chair Ray Collings at 8:15 am on Saturday, March 9, on the campus of Georgia Tech.

Secretary-Treasurer Stephen Davis presented a financial report. (See <u>http://</u> www.davidson.edu/math/



davis/maa-se/FinRpt-Mar2002.pdf.) For August 1, 2000 through July 31, 2001, the Section experienced a deficit of \$2099. With a net of \$925 since the end of last July, the Section's bank balance at the time of the meeting was \$4665.34, with another \$1357 remaining balance in a restricted fund for Section Project NExT activities. The Secretary expressed the hope that the recent run of annual deficits will be interrupted by a prosperous 2002. He also noted a new line under "income" for contributions toward activities supporting student involvement in the section. A call for such contributions came out of the Executive Committee's September, 2001, meeting, and was announced in the fall issue of the Newsletter. A few contributions have been received to date, and the Section membership is encouraged to consider donating to this worthy cause.

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 School of Mathematics at Georgia Institute of Technology, and to the administration of Georgia Institute of Technology, for providing excellent facilities for the 81st 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.

Georgia Tech: Richard Duke, William Green, Toya Hampton, Lew Lefton, Jan Lewis

Georgia Perimeter College: Ashraf Chowdhury, Virginia Parks

American Mathematical Society: John Bryant, Carol Ann Blackwood, Donna Salter

MAA-SE Section Volunteers: Bob Bernhardt (Student Poster Session), John Harris (Project NExT), Jason Huffman (TA Rush)

--Resolution #2--

The Southeastern Section of the MAA expresses warm appreciation to the following companies for their informative and attractive displays presented at the 81st annual meeting:

Addison Wesley

Brooks-Cole

Houghton-Mifflin

Prentice-Hall

**Texas Instruments** 

John Wiley & Sons

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 81st annual meeting:

Tom Barr, Cryptology: Mathematics, Craft, and Implementation

Linda Boyd, Teaching Mathematics from Afar

Subhash Saxena, Optimal Use of Technology in Teaching Geometry at the College-University Level

Edward Yeargers, Ron Shonkwiler, & Jim Herod, An Introduction to the Mathematics of Biology

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, Past-Chair

Stephen Davis, Secretary-Treasurer

Andrew Granville, Section Lecturer 2000-2001

Doug Hardin, Tennessee State Director

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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Governor Theresa Early reported on several items at the national level affecting the Section. National MAA membership at the end of 2001 was 32,558, an 11% increase. Dues for 2003 will increase about 4% in all categories, except for undergraduate students. The software management system conversion has cost about \$600,000, approximately double the estimate. The MAA Washington office is still recovering from mail delays and lost mail due to the anthrax scares last fall. MathFest 2001 in Madison, Wisconsin, had a record attendance, and the Governor encouraged the membership to include this trip in their summer plans. Future MathFests are planned for August 1-3, 2002, in Burlington, Vermont, and for July 31-August 2, 2003, in Boulder, Colorado. The Joint Mathematics Meetings will be in Baltimore (January 2003), Phoenix (2004), and returns to our section with a meeting in Atlanta (2005). Governor Early encouraged members to take advantage of Project PREP (Professional Enhancement Programs), which is offering seven workshops this summer. (See http://www.maa.org/pfdev/prep/prep.html.) The Governor also recognized John Kenelly of Clemson University, newly elected Treasurer for the MAA, who will be also be in Washington next year as MAA Visiting Mathematician.

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Theresa Early then moved to her role as Chair of the Nominating Committee and presented the following slate of nominees:

Chair-Elect: Stephen Davis, Davidson College Vice-Chair for Two-Year Colleges: Patty Monroe, Greenville Tech Secretary-Treasurer: Martha Abell, Georgia Southern University Section Lecturer: John Baxley, Wake Forest University AL State Director: Jeff Dodd, Jacksonville State University GA State Director: Sabrina Hessinger, Armstrong Atlantic State Univ NC State Director: Bob Bernhardt, East Carolina University SC State Director: Subhash Saxena, Coastal Carolina University TN State Director: Gary Hall, Lipscomb University

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

Tom Barr, Chair of the Site Selection Committee, announced the recommendation of the committee that the Section's 83rd annual meeting be held March 12-13, 2004, on the campus of Austin Peay State University in Clarksville, TN. The committee's recommendation was approved without dissent.

Section Chair Ray Collings concluded the meeting with comments celebrating this joint meeting with the AMS Southeastern Section. Section Historian Joe Albree has prepared a short paper (distributed in the registration area) on the background and preparations for this meeting, as well as providing an historic context for this endeavor. We are indebted to the inspirations of our former Chair Bob Fray and of AMS Associate Secretary John Bryant, and to the hard work of Bob Fray, John Bryant, Program Chair Joe Wimbish, and others on the Executive Committee and at Georgia Tech, for a meeting that features over 400 papers and has drawn more than 650 registrants, both records for our Section. Further, the agreement forged by the Section with the AMS already serves as a model for joint meetings involving other MAA sections.

The Chair adjourned the business meeting with an invitation to the Section to attend the 82nd annual meeting, March 21-22, 2003, at Clemson University, being planned as a joint meeting with the Southeastern Atlantic Section of SIAM. Program highlights will include addresses by our Section Lecturer, John Baxley, and by MAA President-Elect Ronald Graham.

### **News from the States**



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

The 7th Annual Alabama State Dinner Meeting was held at Samford University in Birmingham, Alabama on Friday, February 15, 2002. An enthusiastic group of 54 people attended the dinner this year to hear Professor Wlodzimierz

Kuperberg of Auburn University present a talk entitled "Packing Spheres into Cubes". The talk was very well received, and provoked a lively series of interesting questions and comments from the audience. Bruce Atkinson of Samford University 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 16) by the 52nd annual conference of the Alabama Association of College Teachers of Mathematics (AACTM) at Birmingham Southern College. This year, the conference's invited lecture, the Lewis-Parker Lecture, was delivered by John Mayer of the University of Alabama at Birmingham (UAB), who gave a most entertaining presentation on some interesting ideas of "distance" in geometry, logic, and graph theory entitled "On Being Close". The conference also included numerous interesting contributed papers. Congratulations to AACTM President Diane Porter of Troy State University and Barry Spieler of Birmingham Southern College on organizing a very successful event.

Alabama had two participants in the national Project NExT program this year: Terri Contenza of the University of Montevallo and David Dempsey of Jacksonville State University.

Ms. Holly Camp, a senior mathematics major from Athens State University has been named to USA Today's All-USA College Academic Team (see USA Today, 2/27/2002). She was one of 20 chosen from almost 600 students nationwide to be a member of the First Team. She was the only student in the state of Alabama chosen for this honor, and is the only member of the First Team who is over traditional age (29) and has children. She has a 4.00 average and will minor in Computer Science. Ms. Camp has created an award winning web site, MathematicsHelpCentral.com, in order to help students who feel lost in mathematics. Her mentor at ASU has been Dr. Neal Fentress.

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The 22nd 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>.)



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

The 2002 Georgia state dinner was graciously hosted again by Mercer University in Macon, GA on March 21st. Dr. Joe Gallian, whose many contributions to the mathematics community include running one of the leading

NSF Research Experiences for Undergraduate programs in the country as well as co-directing project NExT, gave a talk entitled "Breaking Drivers' License Codes." A special thanks to Jeff Denny who organized this year's dinner where attendance was expected to hit a record of 45 or 50 guests.

Each year numerous conferences and meetings are enjoyed by Georgia's mathematicians, including the sectional meeting of the MAA which was held jointly with the AMS the weekend of March 8th at Georgia Tech.

The Georgia Council of Teachers of Mathematics held its annual meeting last October in Rock Eagle, GA. A special part of the upcoming 2002 GCTM Meeting will be an MAA day highlighted with a lecture by Ivars Peterson.

The Seventh Annual VSU Math Tech Conference was held on February 22, 2002, at Valdosta State University. The keynote address, "Technology in the Classroom: Are We There Yet?" was delivered by Dr. Martha Abell of Georgia Southern University. There were about 60 in attendance from both Georgia and Florida.

Georgia's 17 high school mathematics competitions will culminate in our state tournament this April.



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

The Wake Forest Mathematics Contest will be held on Saturday, April 13th, and the East Carolina Mathematics Contests will be held on Monday, April 8th. These contests are part of the NC State Mathematics Competition held

annually. David Wilson is the Wake Forest contest director, and Mike Spurr and Tim Hudson are the East Carolina co-directors.

Greensboro College hosted the annual state MAA Dinner on March 20th. The speaker was John Swallow of Davidson College, who spoke on "A Coat of Many Colors: Fermat's Last Theorem". Over 80 faculty and students attended this festive occasion.

The annual MAA Dinner in NC will be held at East Carolina University during March or April of 2003; plans are still in progress, as one would expect.



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

This year's South Carolina state banquet was held at Lander University in Greenwood, SC on Friday the 22<sup>nd</sup> of February, 2002. The mathematics department, led by Dr. Patricia Blitch, did a superb job of hosting it. The

appetizer started at 6:00 PM, when everyone got a chance to mingle with everyone else. This was followed by dinner. The highlight of the evening was a talk by the past section lecturer, Dr. Andrew Granville. The title of his lecture was "Prime possibilities and Einstein's errors." It was an exciting expository presentation, very suitable for the banquet audience. It generated a lot of interest, and the discussion continued long after the end. There were forty-four participants, including several students. Six of the participants were from Augusta State University. We appreciated their presence. We charged \$10.00 for students and \$12.00 for all others. Dave Trautman of The Citadel hosted the department's annual

### MAA Southeastern Section Newsletter

mathematics competition for high-school students. Results are available at this URL. <u>http://155.225.48.46/highcomp/2002stuf/2002.htm</u>. The Citadel department of mathematics sponsored a talk for a general collegiate audience given by Professor William Fox of Francis Marion University, "Perfect Partners: Mathematical Modeling, Discrete Dynamical Systems, and Technology" on Tuesday, 26 February.

In conjunction with the University of South Carolina-Columbia Homecoming celebration, their Department of Mathematics will host Homecoming 2002 for the College of Science and Mathematics. At this special event they will honor Professor Thomas Markham for his many years of service to the department and the university by establishing the Thomas L. Markham Scholarship for undergraduate majors in mathematics. The event will include a reception for all Alumni on Friday, October 4, 2002. Further information on Homecoming will be mailed to all alumni in the summer. In the meantime, if anyone has any questions about Homecoming 2002, please feel free to contact the department at (803) 777-4225, or by E-mail at chair@math.sc.edu. AP Calculus Day, an annual event sponsored by the Department of Mathematics, took place this year on May 2. Several hundred high school students and their teachers spent the day on the campus, with a goal of improving performance on the upcoming Advanced Placement exams. The students participated in practice exams in the morning (in AB or BC Calculus, as appropriate) and attended a problem-solving presentation in the afternoon. The day's events also included a seminar and reception for the teachers.

Coastal Carolina University held their Mathematics Contest on March 22, 2002. It is partially sponsored by Verizon. The results are as follows:

- Overall Winner: Dobyns-Bennett (Kingsport, TN)
- Small Schools Level 1: Waccamaw
- Small Schools Level 2: Aynor
- Large Schools Level 1: Dobyns-Bennett
- Large Schools Level 2: Dobyns-Bennett

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

The Tennessee State Dinner was held on Friday, February 8, 2002 at the Marriott-Vanderbilt. The speaker was Gil Strang and approximately 50 attended, 15 of whom were students.

### **Student Chapter News**

### Alabama

The 2001-2002 academic year has been an exciting one for the members of the **Jacksonville State University** student chapter of the MAA. First of all, we have added five new members this year, which is encouraging. We have remained active with meetings and/or activities about every month during the year. In the fall, in addition to an organizational meeting, the chapter sponsored a colloquium given by Dr. Thomas Leathrum of Jacksonville State University. Tom spoke on Mathlets: Java applets for exploring mathematics on the internet. We also had a meeting where the MAA film "Careers in Mathematics" was shown, and several professors gave short presentations on different career and graduate school opportunities for mathematics majors.

In the spring, we have been quite active. A brief meeting was held to organize the spring's activities. Two students from our chapter participated in Comap's Mathematical Contest in Modeling (although they were unable to complete their model for the competition). One of our members attended the Alabama State MAA dinner which was held on February 15 at Samford University in Birmingham. Five of our members attended the recent joint MAA/AMS meeting in Atlanta, held at Georgia Tech on March 8-10. Several members volunteered at the two Preview Days held on campus at JSU to provide information to incoming freshman and their families. Our student chapter also sponsored a colloquium on February 28, given by Professor Wlodzimierz Kuperberg of Auburn University. We plan to have one more colloquium this spring, given by Dr. Bernadette Mullins of Birmingham Southern College, and we will also show the mathematical musical "Fermat's Last Tango" to our group in April.

### **Consider a Contribution**

in support of

### **MAA-SE Student Activities**

See page 10 for Details

### The American Mathematics Competitions

Each summer headlines tout the United States team's performance at the International Mathematics Olympiad (IMO). The six students representing the US are a tiny fraction of the over 700,000 students who participate annually in American Mathematics Competitions (AMC) sponsored events.

The AMC, to paraphrase their statement at <u>http://www.unl.edu/amc</u>, tries to strengthen the mathematical capabilities of the nation's youth by identifying, recognizing and rewarding excellence in mathematics through a series of national tests – the American Mathematics Contest 8 (AMC 8), the American Mathematics Contest 10 (AMC 10), the American Mathematics Examination (AIME), and the United States of America Mathematical Olympiad (USAMO). Each contest has its own characteristics

The AMC 8 began in 1985 as the American Junior High School Mathematics Examination (AJHSME). This forty minute, multiple choice test occurs each year on a Tuesday in late November (this year on November 19, 2002). Any student officially enrolled in Junior High School grade 8 or below, and taking at least one course is eligible. Home school students who are 14 or under are also eligible. About 170,000 students participated in 2001. High scoring students are invited to take the AMC 10.

Begun in 2000, the AMC 10 consists of multiple choice questions that can be understood and solved with pre-calculus concepts. There are actually two contests, A and B. Both take seventy-five minutes and occur on a Tuesday in February. Contest A is on February 11 and contest B is on February 26 in 2003. To be eligible a student must be officially enrolled in grades 10 or below, taking at least one course; or be home schooled and be age 17.5 or under the day of the test. Over 102,000 students competed in 2002. Qualifying students are invited to take the AIME.

Formerly know as the American High School Mathematics Examination (AHSME), the AMC 12 began in 1950. Like the AMC 10, there are two separate contests, A and B, held on two days in February (the 11<sup>th</sup> and 26<sup>th</sup> in 2003). Any student officially enrolled in high school and taking at least one course or any home school student who is 19.5 years or under on the day of the test is eligible to take the seventy-five minute, multiple choice test. Over 136,000 students participated in the 2002 contests. Similar to the AMC 10, qualifying students are invited to take the AIME.

The AIME is an intermediate examination between the AMC 10 or AMC 12 and the USAMO. Participants consist of all students with a score of at

least 100 on the AMC 12 or a score in the top 1% on the AMC 10. Once again, students may select one of two days to take the exam. The dates are approximately five weeks and seven weeks after the AMC 10 and AMC 12. For 2003, the dates are March 25 and April 8. Although the material is still non-calculus based, the test has 15 questions fewer than the 25 on the AMC 8, AMC 10 or AMC 12. It lasts three hours and the answers are only integer values from 0 to 999. About 12,000 students participated in 2002. In addition to helping select the participants in the USAMO, the AIME awards scholarships.

These scholarships are made possible through a generous donation by the Akamai Foundation. Students who are one of the top twenty-five male or top twenty-five female scorers or the top male and female scorers in a total of 53 states/regions on the AIME are awarded \$1000 scholarships to institutions of their choice. The 2002 recipients for the Southeastern Section states are

- Pradeep Baliga of Central HS E Campus, Tuscaloosa, AL
- Jialing Xu of Vestavia Hills HS, Vestavia Hills, AL
- John Huss of Paideia School, Atlanta, GA
- Katharine Pierce of Paideia School, Atlanta, GA
- Anna Chmielewski of North Buncombe HS, Weaverville, NC
- Anders Kaseorg of Charlotte Home Educators Assoc., Charlotte, NC
- Jae Kim of Spring Valley HS, Columbia, SC
- Ambika Bumb of Southside HS, Greenville, SC
- Nathaniel Watson of Farragut HS, Knoxville, TN
- Sara Lemme of Farragut HS, Knoxville, TN
- Zhenlu Zhang of White Station HS, Memphis, TN

The first USAMO was held in 1974. This test is part of a worldwide system of national competitions leading to the IMO. Invitations are sent to approximately 250 of the top scorers on the AIME, AMC12 (A and B) and AMC 10 (A and B) exams. Specifics about the weighted average used to select individuals are available on the AMC website. These students take a six question test lasting nine hours over two days, usually about five weeks after the AIME. The test dates for 2003 were not available when this article was written but they will be roughly the end of March or beginning of April. The questions are all essay or proof. About 100 USAMO participants are invited to attend the Mathematical Olympiad Summer Program (MOSP). The IMO team is selected from the top twelve scorers on the USAMO.

The MOSP is held the four weeks prior to the IMO competition. During this summer program the IMO team is selected and coached. The partici-

### MAA Southeastern Section Newsletter

pants have a rigorous curriculum and daily schedule that provide extensive practice in solving mathematical problems requiring deeper analysis than those solved by students in even the best American high schools. Students also study important areas of mathematics traditionally emphasized more in other countries. These topics include combinatorics arguments and identities, generating functions, the Pigeonhole Principle, Ramsey's Theorems, graph theory, recurrence relations, telescoping sums and products, probability, number theory, polynomials, theory of equations, complex numbers in geometry, algorithmic proofs, combinatorial and advanced geometry, functional equations and classical inequalities. Following the MOSP, the USA team and the adult leaders travel to the IMO site.

Although the IMO started in 1959, the US did not participate until 1974. Today, students from over 80 nations compete on the two day exam. Leaders of the participating teams construct the six-question essay exam from a pool of problems submitted earlier by the invited nations. Some of the problems would challenge most professional mathematicians. The MAA publishes USAMO and IMO questions if you would like to try your hand at solving some of the problems. But students do more than just take a test during their two week stay in the host city. In addition to visiting local points of interest, students have many opportunities for informal interaction with other participants. In 2001, the US team placed second overall in the competition.

All this activity could not take place without strong supporters. The American Mathematics Competitions are sponsored by a number of national organizations. Major Contributors are:

- The Mathematical Association of America
- The Akamai Foundation
- The University of Nebraska, Lincoln,
- The Office of Naval Research
- The Army Research Office
- The Microsoft Corporation.

Contributing members are:

- The Society of Actuaries
- Mu Alpha Theta
- The National Council of Teachers of Mathematics
- The Casualty Actuarial Society
- The American Statistical Association
- The American Mathematical Association of Two-Year Colleges
- The American Mathematical Society

- The American Society of Pension Actuaries
- The Consortium of Mathematics and its Applications
- Pi Mu Epsilon
- National Association of Mathematicians
- School Science and Mathematics Association
- Clay Mathematics Institute
- INFORMS.

For further information about AMC activities check out the official website at <u>http://www.unl.edu/amc</u> or talk with one of the state directors listed below.

### Alabama

- James F. O'Neal, AMC 10/12, Dept. of Math, Troy State University
- Jerry R. Shipman, AMC 8, Dept. of Math, Alabama A&M University

### Georgia

• Eugen J. Ionascu, AMC 8/10/12, Dept. of Math, Columbus State University.

### North Carolina

• Harold Reiter, AMC8/10/12, Dept. of Math, University of North Carolina Charlotte

### South Carolina

• John K. Ludeman, Center of Excellence in Math/Science Education, Clemson University

### Tennessee

- James B. Hart, AMC 10/12, Dept. of Mathematical Sciences, Middle Tennessee State University
- John Harris, AMC 8, Dept. of Math, LeMoyne Owen College

### CALL FOR PAPERS AND ORGANIZERS

Joint Meeting

Southeastern Section MAA and Southeastern Atlantic Section SIAM

> Clemson, SC March 21-22, 2003

Watch the Southeastern Section MAA Website at http://www.huntingdon.edu/MAA/

for details

### **Scenes From the Meeting**



Project NExTers meet Friday morning.



The New Class of Project NExT-SE.



One of many talks given at the meeting.

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National MAA Treasurer John Kenelly laughs with Section Governor Theresa Early.



Georgia Benkart, an MAA Polya Lecturer, gives her talk ...



The student poster presentation draws a crowd.