

MARYLAND-DISTRICT OF COLUMBIA-VIRGINIA  
SECTION OF THE MAA  
NEWSLETTER



Section Meeting  
April 28, 1990  
Frostburg State University, Frostburg, MD

*Vol. 12 No. 1*

MARYLAND-DISTRICT OF COLUMBIA-VIRGINIA  
SECTION OF THE MAA NEWSLETTER

VOL.12 NO.1 EDITOR: JOHN AUGUST MARCH, 1990

Notes from the Chair

After a brutal December, the weather throughout our section has greatly moderated. I am looking forward to our spring meeting in the mountains of Western Maryland at Frostburg State University. The details of the meeting are located elsewhere in the newsletter. As decided at our fall meeting, we will invite the high scorer from our section on the Putnam exam as well as any teams from our section who receive high recognition in the Mathematics Modeling Competition. We hope to have talks presented by the teams from the Modeling Competition. We will make presentations to these students at the meeting. As part of the business meeting, we will elect three section officers: Chairman Elect, Vice-Chairman for Programs, and Treasurer. I hope to see many of our section members at the meeting.

As a reminder to those attending the meeting, the Department of Mathematics at Frostburg State University is sponsoring its 20th Annual Mathematics Symposium on Friday, April 27, the day before our meeting. Additional details about the Symposium may be obtained from Marcelle Bessman (301)689-4453 or -4384.

I am sure that you are well aware that 1990 has been designated "A Year of National Dialogue" during which efforts will be made to stimulate throughout the country a discussion of mathematical education. If you have not already read *Curriculum and Evaluation Standards for School Mathematics*, published by the National Council of Teachers of Mathematics, and *Everyone Counts*, published by the Mathematical Sciences Education Board, I urge you to do so. Also note that Mathematics Awareness Week is April 22-28. The theme this year is "Communicating Mathematics". Perhaps each of us could arrange something interesting in our colleges or work places for this week.

In August, the MAA will celebrate its 75th Anniversary at the summer meeting in Columbus, Ohio, where the MAA was founded. Numerous special activities are planned. The meeting will also continue the year dialogue and will have a particular emphasis on the future leadership roles that the MAA can provide on a regional and a national level. I hope that your travel plans this summer include the Columbus meeting.

The Ad Hoc Committee on Accreditation presented a report on the accreditation of mathematics departments to the MAA Board of Governors at the January meeting in Louisville. The board is studying the document. I would be happy to make a copy of the report available to anyone interested.

Due to the large number of members now in the section, we have decided, as a cost saving measure, to issue only two newsletters per year. However, we will still mail out a call for papers to the college representatives and to organizations from which speakers have come to past meetings. The Vice-Chairman for Programs has set Feb. 15 and Sept. 15 as deadlines for receipt of abstracts for papers to be presented at the meeting following each date.

Any suggestions or comments are warmly encouraged. Please feel free to call or write me or any of the officers. The addresses and phone numbers can be found at the end of the newsletter.

John Milcetic

Governor's Report

At the National Meeting in Louisville, it was my great pleasure to present the Distinguished Service Award to John Smith. This award is given once every five years to a member of our section for service to the section.

At the Governor's meeting there were two topics that generated most of the discussion. The first topic was the 1990 Math Olympiad which is scheduled to be held in Beijing. There was some sentiment that the team should not be sent because of the events that have taken place in China. On the other hand, there were members who felt that not sending a team would hurt our own participants much more than the Chinese government. The vote was overwhelming to send the team unless the State Department issued a warning that it would be unsafe to travel to China.

The other issue that caused debate was whether the MAA should accredit mathematics programs or issue guidelines for mathematics programs. On the issue of accreditation, some members felt that accreditation allows the department to bring additional pressure on the administration for change. It was felt that sometimes a recommendation of an outside accreditation panel would carry more weight than pleas from the department. There are accreditation programs in many fields such as computer science and chemistry. On the other hand it was felt that mathematics programs were more diverse than programs in other fields and that this diversity is a strength of the field. If accreditation was adopted, who would serve on the accreditation panels? It would be a big drain on the

time of our members. An alternative suggestion was for the MAA to issue a set of guidelines that a mathematics program should follow. This would not be as drastic a measure for the organization and would still give local departments some leverage with administrations (but not as much as true accreditation.) The Board of Governors voted to tentatively approve the issuing of guidelines and to continue studying the idea of accreditation. There will be more debate on this subject at future Board of Governors meetings. If you have an opinion on this subject, please write to me.

The summer meeting in Columbus will be a special meeting celebrating the 75th Anniversary of the MAA. There will be a special day set aside for MAA activities, including a parade. There is an outstanding collection of talks planned for this meeting. I urge you to consider attending the summer meeting. Watch for details in Focus.

Howard Lewis Penn

### Spring Meeting Information

#### Location: Frostburg State University

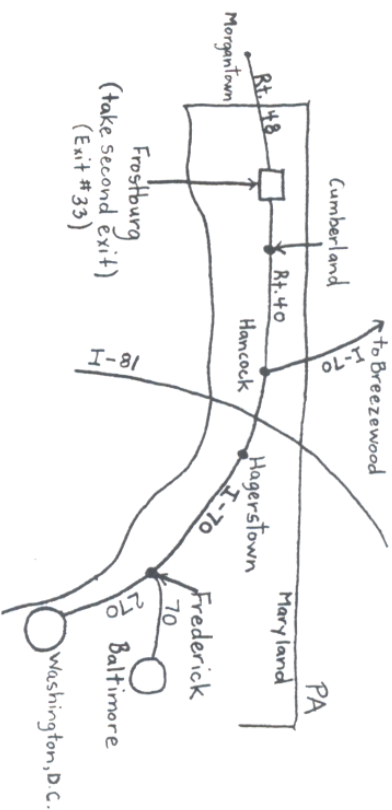
Frostburg State University is a multi-purpose regional university with an enrollment of 4500. Located on the edge of the Appalachian Plateau at an altitude of 2200 feet, the school is approximately 150 miles west of both Washington, D.C. and Baltimore, 80 miles east of Morgantown, W.Va., and 100 miles from Pittsburg, Pa. Because of its cool summers and abundant snowfall, the area has long been enjoyed as a resort. Points of interest in the area include Deep Creek Lake, Penn Alps, a center for the creation and study of local arts and crafts, "The Castle" in Mount Savage, and the highly popular Allegany Central Scenic Railroad. Visitors to Frostburg should consider dining at Au Petite Paris, The Old Depot, the restored, historic Gunter Hotel, or taking home a present from DeLores Truly's Fine Candies (located at the corner of High St. and College Ave., each about a half mile from campus).

#### Directions:

*From the East:* Take I-70 west to Route 40 west of Hancock, MD. Follow Route 40 to Cumberland where this expressway becomes U.S. Route 48. Proceed to the second exit for Frostburg, Exit 33. Bear right onto Midlothian Road and proceed about one mile to the main entrance of the campus.

*From the West:* Take U.S. Route 48 east to Exit 33. Turn left onto Midlothian Road and proceed about one mile to the main entrance of the campus.

*From the South:* Take Route 81 north to I-70 outside of Hagerstown. Follow the directions from the East.



#### Lodging Information:

*Holiday Inn, Downtown Cumberland,* (301)724-8800, \$49 - \$69, 10 miles east of the campus.

*Continental Motor Inn, East Cumberland,* (301)729-2201, \$35-\$53 single, \$40-\$55 double, 5 miles east of the campus.

*Casselman Inn, Grantsville,* (301)895-5055, \$20-25 single, \$35 double, 15 miles west of the campus.

*Comfort Inn, Frostburg,* (301)689-2050, \$43-\$55 single, \$48-\$60 double, 1 mile from campus.

*Fallinger's Hotel Gunter, Main St. Frostburg,* (301)689-6511, 1 mile from campus.



MD/DC/VA SECTION MEETING, MAA  
SATURDAY, APRIL 28, 1990  
FROSTBURG STATE UNIVERSITY

8:45 - 11:00 Registration; 9:10 Welcome

9:30-10:30 Invited Speaker: Harley Flanders  
"Graphing Curves & Surfaces on Computer"

10:30 Contributed Paper Session I

Pernijit Sehder and Prem Bhatia, Coppin State Univ.  
"A System Approach of Teaching a Solution of  
Quadratic Inequalities and to Display the Line  
Graph on a Computer"  
Field: Computer Science

Elizabeth Teles, Montgomery College, Takoma Park  
"The Changing Calculus Curriculum: Perspectives  
from Seven Community Colleges in Maryland"  
Field: Calculus Education

Gail Armstrong, James Madison University  
"Simple Rings"  
Field: Algebra

Gary Gensler, James Madison University  
"Simulation Study of a Single Server Queuing Model  
with a Non-Homogeneous Poisson Process"  
Field: Statistics

11:00 Contributed Paper Session II

John Nolan, American University  
"Random Fractals"  
Field: Probability/ Analysis

Vojislav Stojkovic, Morgan State University  
"Synthesis of Predicates from Input/Output"  
Field: Artificial Intelligence

Peter Cummings, James Madison University  
"In Search of an Addition for Hofler's Model"  
Field: Algebraic Structures

Marcelle Bessman, Frostburg State University  
"Teaching Calculus with an Interactive 'Microcal'  
Laboratory"  
Field: Calculus/ Mathematics Education

11:30 MD/DC/VA Section Business Meeting

12:30 Lunch

1:30 Invited Speaker: Judy Green  
"Women in Mathematics Before the MAA"

2:30 Contributed Paper Session III

Rannon Mata-Toledo/David Duvall-Early/Mark  
Miller, James Madison University  
"A Comparison of Three Methods for Proving  
Programs"  
Field: Computer Science

G. Edgar Parker, James Madison University  
"Yet Another Modeling Course"  
Field: Mathematical Education

William Wardlaw, United States Naval Academy  
"The Ring of Arithmetic Functions"  
Field: Algebra/Number Theory

Karen Klaimon, James Madison University  
"Proofs by Full Covering"  
Field: Analysis

3:00 Mathematical Modeling Session  
Invited student teams from COMAP Competition.

## CAMPUS NEWS

**Frostburg State University:** *New hires:* R.A. Winton, Ph.D. (Univ. of Texas at Arlington); Mohammad Khavanin, Ph.D. (Univ. of Texas at Arlington); and Prof. Maurice Singley (Univ. of Alabama).

**Hood College:** Recently granted a Pi Mu Epsilon Chapter, only the fourth in Maryland.

**Howard University:** *Faculty on leave:* Louise A. Raphael, to M.I.T., Cambridge, MA.

**Salisbury State University:** *New hire:* Dr. Kathleen M. Shannon (Ph.D. Brown Univ.).

**Virginia Commonwealth University:** *Visiting faculty:* Dr. Arpad Takaci and Dr. Djurdjica Takaci (from the Institute of Mathematics at Novi Sad).

Send your news items to: John August, Editor.

## Call For Papers

For the Fall Meeting: September 15, 1990  
For the Spring Meeting: February 15, 1991

## MD-DC-VA Future Meeting

*Fall 1990 Meeting:* November 16-17, 1990  
Towson State University, Towson MD  
*Spring 1991 Meeting:* Virginia Commonwealth University

## Spring Election State

*Chair Elect:* S. Helen Christensen (Loyola College)  
*Vice-Chair (Programs):* Mary Kay Abbey (Montgomery College)  
*Treasurer:* Bob Tardiff (Salisbury State University)  
Thanks to our nominating committee: Liz Teles and Robert Lewand.

**Message from the Chairman:** Mathematical note to all card players  
... "seven shuffles is enough."

## WORKSHOP ANNOUNCEMENTS

### *The Mathematics of Neural Networks*

4-8 June 1990

Dr. R.J. Scott, Computer Science and Information Systems, University of Maryland Baltimore County. He has been active in Neural Networks since 1961, when he published a seminal paper on neural models. He worked for government agencies and taught mathematics in the evenings. Today his main interests are to teach and to do research in Neural Nets.

Cost: \$245.00 (deposit of \$100.00)

Location: Salisbury State University  
Workshop Director: Dr. B.A. Fusaro (301)543-6470, 6471  
Dept. of Math Sciences, SSU, Salisbury, MD 21801

### *The Mathematics of Computer Graphics*

11-15 June 1990

Dr. J.W. Weiss, Mathematics and Computer Science, Fairfield University, Connecticut. She has been active in Computer Graphics since 1977. She teaches the subject to undergraduates, has taught several MAA minicourses (as Joan Wyzkoski), and spends her summers modeling in Computer Graphics for business or government.

Cost: \$245.00 (deposit \$100.00)

Location: Salisbury State University  
Workshop Director: Dr. B.A. Fusaro (301)543-6470, 6471  
Dept. of Math Sciences, SSU, Salisbury, MD 21801

## \*\*For Faculty and STUDENTS.\*\*

### *Cultivating Mathematical Talent*

21 April 1990

An MAA sponsored student conference. At the morning sessions, students may make their own presentation or enjoy the presentations of other students. Enjoy lunch and sit back and listen to expert users of mathematics. In the afternoon, join a hands-on workshop given by Michael Barnsley on Chaos and Fractals (first seats to students).

Cost: \$10.00 (student rate)  
\$15.00 (faculty)

(includes lunch & workshop)  
Location: Goucher College, Towson, Maryland  
Send Money to: Ben Fusaro  
Dept. of Mathematical Sciences  
Salisbury State College  
Salisbury, MD 21801

(include your name, status [student/faculty], & school)  
Please inform your students of this opportunity.

**OFFICERS**

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**Student Chapters Coordinator**  
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**REGISTRATION FORM FOR SPRING MEETING**  
**(Deadline: April 20, 1990)**

Registration Fee \$5.00 \_\_\_\_\_  
 (student rate) \$1.00 \_\_\_\_\_

**Luncheon Details**

*Cold Meat Plate:* Sliced ham, turkey, and roast beef with choice of Swiss, American, or provolone cheese, garnished with sliced tomatoes and crisp vegetables. Served with Italian pasta salad, fruit cup, parfait, and beverage. (How many?) \_\_\_\_\_ \$6.50 \_\_\_\_\_  
 Vegetarian meal available upon request. Total \_\_\_\_\_

Name \_\_\_\_\_  
 Address \_\_\_\_\_

Make checks payable to MAA and send to :  
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