MARYLAND-DISTRICT OF COLUMBIA VIRGINIA SECTION NEWSLETTER

CALL FOR PAPERS

Once again it is time to invite proposals for talks for the April 27 meeting of the Md-DC-Va Section of the MAA to be held at Hollins College in Hollins College, Virginia (a suburb of Roanoke). Papers on all aspects of mathematics, mathematics education, applications of mathematics, and the use of computers are welcomed and encouraged.

Our main speaker for this spring meeting is Dr. Carl Pomerance whose special interest is number theory. We would like to run a special session on number theory to complement his talk. If you have been doing work in this area, you are urged and encouraged to submit an abstract.

We would also like to run a special session of student papers. We urge faculty to encourage their students to attend this meeting and to offer a report, perhaps on some independent project or application of mathematics or computer science that the student has experienced. If you have honors students working with you or a mathematics seminar, this would be a good time for your students to present their papers.

Presentation of papers is ordinarily limited to thirty minutes, but hour presentations can be easily arranged. Those interested in presenting papers are asked to send an abstract to:

> Professor Elizabeth J. Teles
> Vice-Chairperson for Programs
> Department of Mathematics
> Montgomery College
> Takoma Park, Maryland 20912
> (301) 587-4090 Ext. 305 or 283 (Office)
> (301) 262-9586 (Home)

The deadline for submission of abstracts is March 6.

PROGRAM SPEAKER: Dr. Carl Pomerance will address the section on Saturday, April 27. He is a professor of mathematics at the University of Georgia and is currently working on a two month special project for Bell Labs. His main interest is number theory. The title of his presentation will be "How to Factor a Number". Dr. Pomerance has given many talks at MAA meetings. He was one of the invited speakers at the summer meeting of the Mathematical Association of America held in Eugene, Oregon.

WORKSHOP AT SPRING MEETING

The Section will sponsor a workshop at its annual spring meeting at Hollins College. The speaker will be Professor David Schneider of the University of Maryland.

TOPIC: Writing Mathematics Programs for the IBM PC

TIME: Saturday, April 27, 1985 from 3:00 to 6:30 PM

COSTS: Five dollars per participant payable at registration; there is no limitation placed on the number of participants.

ABSTRACT: IBM PC BASIC has many special features that can be utilized to write programs for mathematics instruction. Among other topics, we will explore techniques to simplify and enhance the graphing of functions, methods that allow the user to input functions, and tools for displaying mathematical symbols on the screen.

LOST AND FOUND: A raincoat was found at the fall meeting in Annapolis last November. If this coat is yours, then you should contact Prof. Howard Penn of the United States Naval Academy at (301) 267-3892.

NOMINATING COMMITTEE: The following members of the Section were appointed to a nominating committee at the Annapolis meeting:

John Schmeelk, Chairman   Virginia Commonwealth University
Ruth Hancock   Emory and Henry College
Robert Tardiff   Salisbury State College

The positions to be filled are the position of Secretary and the position of Vice-Chairman for Membership. The Secretary is responsible for the minutes of meetings and for the correspondence of the Section. The Vice-Chairman for Membership has the additional responsibility of serving as Newsletter Editor. If you wish to nominate someone for either of these positions, then you should contact one of the members of the nominating committee.

STUDENT SESSION: Three students from Goucher College made presentations at the Annapolis meeting. These papers were well received. Student papers will form an integral part of the spring meeting. If you have students who have special projects or who have given presentations which would be of interest to students and faculty at other institutions, then please encourage them to participate in our spring meeting. The student who participates in these meetings not only benefits from the chance to meet and exchange ideas with others but he also has a chance of receiving the award for the outstanding student paper.

HOTEL RESERVATIONS

You should make your own reservation; however, do not ignore the special arrangements that have been established by Caren Diefenderfer.

HOWARD JOHNSON MOTOR LODGE, Hollins (044) (within walking distance
7656 Williamson Road, N.W.   to the campus)
Roanoke, VA 24019
Toll free 800-654-2000
Local 703-366-7671

If you call here for reservations be sure to indicate that you are part of the MAA/Hollins group. These special rates will apply if we reserve fifteen or more rooms: Special rates - Single $25 + tax; Double $29 + tax; $4 for each additional person.

OLYMPIA INN (one mile to Hollins campus)
7120 Williamson Road N.W.
Roanoke, VA 24019
Toll free from Virginia: 800-572-1022
                          800-367-1022 from outside Virginia.

If you call here for reservations be sure to indicate that you are part of the MAA/Hollins group. These are special rates: Single 19.95 + tax; Double $27.95 + tax; $4 for each additional person.

HOTEL ROANOKE (ten miles to Hollins campus)
19 Jefferson Street N
Roanoke, VA 24026
Toll free from Virginia: 800-542-5898
                          800-336-9684 from outside Virginia
Local: 703-343-6992

The Hotel Roanoke is a charming, English Tudor Hotel in downtown Roanoke, known for its gracious and excellent dining room, the Regency Room. If you call here for reservations be sure to indicate that you are part of the MAA/Hollins group. These are special rates: Single $38 + tax; Double $40 + tax.

PEAKS OF OTTER LODGE (thirty miles to Hollins campus: forty-five minute drive) Located on the Blue Ridge Parkway.
Local: 703-586-1081

The Peaks of Otter Lodge is situated near hiking trails and picnic facilities on the Blue Ridge Parkway north of Roanoke. The Lodge serves a fine seafood buffett ($12.95) on Friday from 5:00 to 8:30PM. They serve Sunday breakfast ($5.25) from 7:30 to 10:00 AM and Sunday dinner ($7.50) from 12:00 to 8:30 PM. This is an ideal family vacation spot. A double room is $48 + tax.

DIRECTIONS TO HOLLINS COLLEGE

The College is located on US Route 11 approximately two miles north of the Roanoke city limits. Driving time from the Washington Beltway, I-66 intersection is approximately 4 hours and 30 minutes.

By Air: Piedmont, Henson and Air Virginia all fly into Roanoke Woodrum Airport, which is within five miles of Hollins College. The Airport Limousine Service charges $6.50 per person for ground transportation from the Airport to the College.

By Car: Hollins College is located very close to I-81. When traveling by car (from the north or from the south) take Exit 43. (You will see a sign for Hollins College on the Interstate). At the end of the exit ramp, follow the signs to Route 11. (South bound traffic will make a left turn; north bound traffic will make a right turn.) Continue to the first stoplight (approximately one mile), then turn left at this light onto U.S. 11 North. The entrance to Hollins College is on your left approximately 6/10 of a mile from this point where you turn onto U.S. 11 North. Follow the MAA signs on campus to the Dana Science Building.

LUNCHEON

Luncheon will be served to our group in the Ballator Gallery of the Moody Center at Hollins College on Saturday, April 27. We must know how many persons to expect. Consequently it is necessary that you send your luncheon reservation and money to the Section's treasurer, Ray Hancock, by April 17. Please see the pre-registration form at the end of this NEWSLETTER which will assist you in placing your luncheon reservation.

LUNCHEON MENU

    Chilled vegetable juice
    Tossed Salad
    Chicken, mushroom and artichoke crepes
    Broccoli spears
    Chocolate eclairs
    Iced tea, coffee

Price: $5.50 per person. Please place your luncheon reservation with Ray Hancock on or before April 17.

OUTSTANDING SERVICE AWARD

The Section selected Dr. Dorothy Bernstein who has retired from Goucher College to be the first recipient of its AWARD FOR MERITORIUS SERVICE. Dr. Bernstein was selected from a pool of highly qualified candidates who had been suggested by various members of the section. The section formally voted to accept the report of the Committee on Outstanding Service Award on November 10, at the fall meeting in Annapolis. On January 10, 1985, on behalf of the Section, our Governor, Dr. John Smith, reported our action to the Board of Governors and will deliver her Certificate of Meritorius Service at the annual Summer Meeting in Larimie, Wyoming, next August. Dr. Smith will make the formal presentation at that time.

TROUBLE: NEWSLETTER FINANCES

The following item appeared in a recent NEWSLETTER from an allied section of the Association.

"Currently, each of the approximately 400 members of the MAA who reside in the Allegheny Mountain Section receives the NEWSLETTER twice a year free (modulo below). The Section bears the cost of preparation and mailing, which amounts to about $400 per year. The registration fee paid by those attending the Spring Section Meeting pays the expenses of the Section, including the cost of the NEWSLETTER, and speakers and other expenses incurred at the Spring Meeting. Last year the Section Officers realized that the cut rate $5 registration fee was not doing the job, so it was raised last spring to a very modest $10. This $10 fee has not yet caught up with the backlog of deficits; at present we have $95 in our checking account, which must last until next April's Spring Meeting. Since our NEWSLETTER is an important communication device for the Section, it should be published and mailed as always, but $95 will not cover its expense. For this year only the Section Officers are asking that members donate $5-$10 to defray the cost of the NEWSLETTER. As of the mailing of this NEWSLETTER, we are in the red. With the asked for donations and the $10 registration fees collected at the next Spring Meeting, our finances will be in good order so that further requests for donations should be unnecessary."

"To donate, make your checks payable to the Allegheny Mountain Section of the MAA, and send them to our Treasurer, Dave Brown, Bethany, WV 26032."

This extract from the ALLEGHENY MOUNTAIN SECTION is given here to cause you to think seriously about our financial standing. We are not in a financial straight jacket yet. However, with four NEWSLETTERS each year for 1500 members (6000 @ 5.2 cents postage + 48000 pages 3 cents per page) we may soon face some sort of financial accommodation. We can remain sound if registration fees are increased. Please think about this problem---do we wish to avoid a problem such as the one being faced by the ALLEGHENY Section?

INTERNATIONAL MATHEMATICAL OLYMPIAD

The 25th International Mathematical Olympiad (IMO) was held on July 4-5, 1984, in Prague, Czechoslovakia. The top winners and their scores are:

                1st place - USSR (235)
                2nd place - Bulgaria (203)
                3rd place - Romania (199)
                4th place - Hungary (195)
                4th place - USA (195)

The United States has participated only since 1974, but U.S. teams have consistently been in the top five, taking first place honors on two occasions.

Team member, David Moews, of Willimantic, Connecticut received an Individual First Prize for his perfect score of 42 on the IMO examination. Four teammates, Michael Reid of Woodhaven, New York, David Grabiner of Claremont, California, Steven Newman of Ann Arbor, Michigan, and Jeremy Kahn of New York, New York, received Individual Second Prizes. Team member, Douglas Davidson of McLean, Virginia, received a third prize. (Last year, Michael Reid won an Individual First Prize; Steven Newman and Jeremy Kahn won Individual Second Prizes.)

The U.S. team was chosen on the basis of performance in the USA Mathematical Olympiad (USAMO), held this year on May 1. Team members attended a rigorous three-week training session held at the U.S. Naval Academy in Annapolis.

The Mathematical Olympiad activities are sponsored by five national societies in the mathematical sciences. Financial support was provided by IBM, the Army Research Office, the Office of Naval Research, and Hewlett-Packard.

LECTURE SERIES AT JOHNS HOPKINS

The 1985 Mathematical Sciences Lecture Series of the Department of Mathematical Sciences, Johns Hopkins University, will be held June 17-21, 1985, with Professor C. R. Johnson, Clemson University, to deliver 10 research-level lectures on Combinatorial Aspects of Matrix Analysis. Additional speakers to be announced will present complementary material, but also time will be reserved for small group discussions. The conference will be limited in size, with participants selected from applicants from universities, government and industry. Researchers in combinatorics and matrix analysis, including advanced graduate students, are invited to apply. Limited travel and subsistence funds will be available. For more information contact Alan F. Karr (301-338-7214), Department of Mathematical Sciences, The Johns Hopkins University, Baltimore, Maryland 21218.

SUMMER WORKSHOPS

The Maryland-DC-Virginia Section will offer two five-day Summer Workshops for college mathematics teachers:

Title: Program Design and Pascal
Dates: June 3-7, 1985
Lecturer: William J. Collins, Salisbury State College
Location: Salisbury State College, Salisbury, Maryland
Cost: $195 for instruction, room and board.

Algorithm design is a key to problem-solving and program development. A method will be presented for guiding the analysis and design of algorithms. Pascal's control structures and data types support this approach. Pascal is becoming the introductory language of choice for mathematics and computer science, is widely available on microcomputers, and has been included in Advanced Placement for high school students.

Title: Computer Solutions of Differential Equations
Dates: June 10-14, 1985
Lecturer: Herbert S. Wilf, University of Pennsylvania
Location: Salisbury State College, Salisbury, Maryland
Cost: $195 for instruction, room and board.

Students are entering college with increasingly more background in computing. This provides an opportunity for mathematics teachers to emphasize computational aspects. Differential equations offers a great deal of scope for computer applications. This workshop will study several numerical methods and will develop criteria for evaluating them. Participants should have a working knowledge of BASIC, FORTRAN, or PASCAL.

For more information about either of the Maryland-DC-Virginia Section workshops, write to Dr. B. A. Fusaro, Department of Mathematical Sciences, Salisbury State College, Salisbury, MD 21801 (301-543-6470).

PREREGISTRATION FORM

Registration for Spring meeting |___| @ $2.00 each $_____

Luncheon reservations |___| @ $5.50 each   _____

IBM PC Workshop |___| @ $5.00 each   _____

                                            TOTAL $_____

Person or persons to be credited by the Treasurer

_____Name

_____Address

_____State_____Zipcode_____

Send your luncheon reservation to: Dr. Ray Hancock
                                     Box Y
                                     Emory & Henry College
                                     Emory, VA 2437