



Maryland-District of Columbia-Virginia  
Section of the  
Mathematical Association of America

Newsletter, Spring 1995

Vol. 16, No. 2 Final

March 1995

### Howard Penn Awarded Certificate of Meritorious Service

Professor Howard Lewis Penn of the United States Naval Academy was presented with a Certificate of Meritorious Service at the January meeting of the MAA in San Francisco. He has served our Section for ten years as Vice Chair for Membership, Vice Chair for Programs, Chair, and Governor. He has chaired the Section's Nominating Committee several times, given two minicourses and at least fifteen papers at Section meetings. Professor Penn was the Section's first newsletter editor: as Vice Chair for Membership, he began the newsletter in coordination with the Section's then-Chair, the late John Smith. As Vice Chair for Programs, Professor Penn organized the first special session at our Section meetings. As Chair, he organized the Section's first two-day meeting, which was held at the Naval Academy. That meeting featured the Section's first banquet speaker and first minicourse. For these and the many other things Howard has done unselfishly for our Section over the years, he richly deserves this certificate.

Also inside...

Summer workshops and short courses

A message from our Section's governor

News about Student Chapters

### Spring Meeting April 7-8 Hampton, Virginia

Join us at Thomas Nelson Community College for a full program featuring

- an invited address by Christopher Schaufele, co-author of *Earth Algebra*
- announcement of this year's winner of the John Smith Distinguished Teaching Award
- a Friday night supper and IMAX film at the Virginia Air and Space Museum
- workshops on using the Internet for mathematicians and on environmental mathematics
- announcement of our Section's winners in the national mathematical modeling contest
- contributed paper sessions
- election of a new newsletter editor
- and more!

Details inside.

## Confessions of a Section Meeting Junkie

I started attending MAA Section meetings several years ago -- I'm not really sure why -- but I'm glad I did. At these meetings I have had the chance to...

- hear interesting and exciting talks about mathematics by Paul Halmos, Underwood Dudley, Fred Rickey, Keith Devlin, Celso Grebogi, and many others;
- meet colleagues from government and industry who have proved to be a valuable resource in providing research ideas, lectures, and internship sites for students;
- give talks and get encouragement and feedback which was helpful in getting my ideas published;
- acquire free software for teaching and research;
- learn what's going on at other academic institutions in curricular reform;
- hear about other colleges' experiences in the national mathematical modeling competition, which convinced me that *my* students ought to participate, too;
- buy MAA books at special meetings-only discounts;
- take my students to mathematical meetings, where they have presented talks in a relaxed, friendly setting;
- eat lunch with the author of a current textbook and chat about its content;
- attend workshops on using the computer in a differential equations class, on the history of mathematics, on how to use a graphing calculator;
- meet faculty from other institutions, so that I now recognize some more faces at those giant national meetings.

I *always* come away from a Section meeting with new ideas and new friends, inspired to return to my work with renewed vigor. Most of you who will read this newsletter do *not* attend Section meetings, and I would like to encourage you to give us a try. You will find colleagues from universities, colleges, and high schools. There are students, faculty, and mathematicians from industry and government agencies. There are workshops, banquets, contributed paper sessions, invited lectures, and -- at this meeting -- a party in a museum and an IMAX film! Come join us in Hampton and see what MAA Section meetings have to offer you. First-time attendees receive a \$5 gift certificate towards the purchase of an MAA book at the Hampton meeting.

### A special note for department representatives...

Dan Kalman of American University has organized a Saturday breakfast meeting of our Section's institutional representatives. We will begin eating at 7:30 by the registration area in Hastings Hall on the Thomas Nelson Community College campus, then continue to meet (and eat) in Room 400 until 8:30.

Section Reps: If you are not able to make this meeting, please ask someone to come in your place. An RSVP will be mailed to reps soon.

Several members challenged us in our last business meeting: how can we encourage more Section members, especially younger or minority members, to participate in Section activities? Section reps could play a major role in meeting this challenge.

Ben Fusaro, Chair  
Elizabeth Teles, Governor

## Governor's Report

From Monday January 2 to Sunday January 8, 1995, I attended the joint annual winter convention of the American Mathematical Society (AMS) and the Mathematical Association of America (MAA) in San Francisco, California. San Francisco is a wonderful place to have a meeting because the food is great and there are fun other things to do.

On Tuesday January 3, I attended the meeting of the Board of Governors of the MAA. This was my last meeting as governor, my 3 year term ending on June 30, 1995. One of the main topics of discussion at this meeting was whether the annual MAA summer meeting should continue. AMS has indicated that it may no longer want to have joint meetings in the summer with MAA. Attendance at summer meetings has been dropping as AMS is sponsoring more special summer meetings rather than numerous special sessions at a single meeting. In addition, as travel funds in departments becomes more scarce, faculty are often now only able to attend one meeting per year and choose the winter rather than summer meeting. The summer meeting in Minneapolis had about 800 attendees while this winter meeting in San Francisco had about 4500. This particular winter meeting was the second largest joint AMS/MAA meeting ever. MAA may have to decide whether to have summer meetings on their own. Because there are many fixed costs associated with a meeting, the average cost per participant to MAA is almost twice as much at a summer meeting as at a winter one. Some thoughts for improving attendance at summer meetings includes having meetings with themes which MAA cannot do if we continue with AMS, having a summer employment register with industry rather than academic employers present, and having groups of MAA sections "sponsor" the meetings in their area. Another possibility is

to have the summer meetings in only odd-numbered years since the International Conference of Mathematics (ICM) meets in years evenly divisible by 4 and the International Conference of Mathematics Education (ICME) meets in the other even numbered years. Without a summer meeting, there is some question about how governance, task forces, and other committees could do all their business. A considerable amount of work is being done by email, but some face to face which seem necessary.

There will be however be a joint meeting of MAA/AMS in the summer of 1995 at Vermont at the University of Vermont and in the summer of 1996 at a site to be determined. The future beyond that is not certain. As a little informal information which I can pass on to the national office, it would be helpful if you could take a few minutes to fill out the form on the reverse and send to me. This is my last report to you as governor of the section. I thank you for allowing me this wonderful opportunity to serve you and MAA for the past 3 years. It was a very great honor and also fun!!

See you in April at Thomas Nelson. Hope many of you can also come to the summer meeting in Vermont.

Respectfully submitted,

Elizabeth J. Teles, Governor of MD-VA-DC  
Section of the MAA

## Summer Meeting Survey

Name and Address: (not required)

I think the summer meetings should continue because

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I think there is no need for the summer meetings because

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I have been to one or more summer meetings in the past 5 years (name which ones) because

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I would find the summer meetings more useful if the following was part of the meeting:

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Mail to Elizabeth Teles, Room 835, Division of Undergraduate Education, National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230 or send by email to [eteles@nsf.gov](mailto:eteles@nsf.gov).



MINUTES OF THE FALL MEETING  
MD-DC-VA SECTION OF THE MAA  
Western Maryland College, 11 November 1994

The meeting was called to order by the Chair, B.A. Fusaro.

A formal reading of the minutes was waived in as much as the minutes had been published in the newsletter. Some highlights were given by the Secretary, James P. Coughlin, and the minutes were approved.

The treasurer's report was given by Jon Scott, the treasurer, and the section had a positive balance and, after all the bills associated with the Fall meeting have been paid, an estimated balance of \$6900 should remain.

The governor's report was given by Elizabeth Teles, who is slated to retire from that office.

The newsletter editor, Elizabeth Mayfield, reported the status of the newsletter. She pointed out that it is available on the MAA's "gopher" network. Those who have misplaced their copies can get substitute copies from that source. John Milcetic proposed that the newsletter be delivered by e-mail and, when it was pointed out that some members do not have access to e-mail, suggested instead that the newsletter be delivered by e-mail to those who do have such access and only mailed to those who do not. There was a discussion of the point and it was agreed that it be looked into.

The chair praised Sally Garber for her fine work in conducting the high school mathematical contest in the state of Virginia.

The chair also called for nominations for the Outstanding Teacher Award. They should be sent directly to the Secretary at the Mathematics Department of Towson State University in Towson, Maryland (21204).

The Secretary was directed to draft a letter of thanks to Western Maryland College for their hospitality in hosting the Fall meeting.

A question was raised from the floor about increasing the representation of Blacks and other minorities at these meetings. After some discussion it was agreed that it would be desirable to raise the attendance of all, minorities included. A "Welcome Table" was suggested. It was agreed that this idea deserved support and will be looked into further.

A suggestion was made from the floor to utilize the Institutional Representatives to increase involvement (attendance) with our section. This was deemed to be worthy of further investigation.

Helen Christensen spoke of the evolution of the Section Handbook and showed us the most recent copy. It will be made available to anyone expressing an interest.

Mary Kay Abbey spoke on the subject of the forthcoming elections. There are four candidates for the office of Governor vacated by Teles -- Helen Christensen, Kevin Colligan, John August and Robert Lewand. A volunteer is being sought to run for the office of Newsletter Editor soon to be vacated by Betty Mayfield. Anyone interested in volunteering should get in touch with Mary Kay Abbey

Ben Fusaro called attention to the forthcoming Mathematical Modelling contest, sponsored by COMAP, to be held in February.

Details can be found on Gopher.

John Biggs reported on the workshop held at Frostburg State University in June (1994). It was entitled: Surfaces, Soap Bubbles and General Relativity. Frank Morgan of Williams College presided. There were 17 participants and 8 talks. It was quite successful.

Kathleen Shannon, the Section Co-ordinator for Student Sections was introduced to the meeting. Andy Vogt, as most of you know, is the other co-ordinator.

Beverly Phillips, the Program Chair, reported on the plans for the forthcoming Spring meeting to be held at the Thomas Nelson Community College. This will be a joint meeting with VMATYC. It is not too early to send in papers now.

# MATHEMATICAL ASSOCIATION OF AMERICA MD-DC-VA SECTION

## TREASURER'S REPORT

February 9, 1995

Balance -- July 23, 1994	\$6,947.24
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### Receipts

Interest	\$85.33
Fall, 1994 meeting	\$2,232.00
MAA national office	\$50.00

Total Receipts	\$2,367.33
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### Expenses

Fall, 1994 newsletters	\$1,263.08
Fall, 1994 meeting - banquet and luncheon	\$1,596.62
Fall, 1994 meeting - Speaker	\$334.09
New member incentive	\$25.00
Supplies	\$192.60
Spring, 1995 meeting - deposits	\$1,500.00

Total Expenses	\$4,911.39
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Balance -- February 9, 1995	\$4,403.18
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## Spring 1995 Meeting: April 7-8 Thomas Nelson Community College

This Spring's meeting will be held at Thomas Nelson Community College, Hampton, Virginia, on April 7 and 8. It will be a joint meeting with VMATYC, the Virginia Mathematics Association of Two-Year Colleges.

TNCC is a two-year public institution, serving primarily the residents of Hampton, Newport News, Poquoson, and Williamsburg, and James City and York Counties. Established in 1966, it is named for a signer of the Declaration of Independence and early colonial governor of the Commonwealth.

Within a 40-mile radius of Hampton are Williamsburg (Busch Gardens, Water Country USA, Colonial Williamsburg, Anheuser-Busch Brewery, Pottery Factory), Newport News (Mariners Museum, War Memorial Museum, Virginia Living Museum, recreational park), Yorktown Battlefield, and the Norfolk/Virginia Beach area.

### Meeting Highlights

On **Friday afternoon**, there will be several **workshops**, sponsored by MAA and VMATYC. See the meeting program attached for times and descriptions.

We will spend **Friday evening** at the **Virginia Air and Space Museum** where the MAA has reserved the entire museum. There will be a cash bar, a light buffet supper, and viewing of the exhibits, followed by a special showing of the IMAX film *Destiny in Space*.

On **Saturday** there will be a complimentary continental breakfast, a meeting of departmental representatives, book sales and displays, a joint MAA/VMATYC panel on standards for introductory college mathematics, and contributed paper sessions, including many papers by students. At our regular business meeting, a new newsletter editor will be elected, and we will announce our Section's winners in MCM 95 and the John Smith Distinguished Teaching Award. Finally, we will have a gala luncheon at the Omni Hotel and hear an invited talk by Christopher Schaufeale.

### Invited Speaker Dr. Christopher Schaufeale

Professor Christopher Schaufeale of Kennesaw State College in Marietta, Georgia, received his Ph.D. from Florida State University and has published widely in combinatorial group theory and the topology of manifolds. He has taught at LSU, the University of Georgia and, for the past twenty years, at Kennesaw State. But he is perhaps best known as the co-author, with Nancy Zumoff, of the intriguing new text *Earth Algebra: College Algebra with Applications to Environmental Issues*, published in 1993 by HarperCollins. A member of both MAA and AMATYC, Dr. Schaufeale serves on the MAA's Committee on Mathematics and the Environment. Since 1990, he has presented numerous workshops, presentations, and short courses on earth algebra and earth math projects, including developing an adaptation of earth algebra for the college algebra course at Navajo Community College. He will speak to us on "Earth Math: Precalculus with an Environmental Focus."

# Meeting Program

FRIDAY, APRIL 7

## WORKSHOPS

### On the Internet:

2:00-4:00 pm, "A Mathematics Educator's Guide to the Internet"

Jon Scott, Montgomery College and  
Elizabeth Teles, National Science Foundation

4:30-5:15 pm, "The Mathematics Archives"

Przemyslaw Bogacki, Old Dominion University

Location: TNCC, ITT Building, #525 Butler Farm Road (across the street from the main campus). Park on either side of the building. Enter through the main entrance (behind the flag pole). Follow the yellow "TRC Computer Training" signs to room 745.

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The following workshops are on the main campus  
Hastings Hall, 2nd floor (the only two story building on campus)  
Room numbers will be posted the day of the workshops.

3:00-5:00 "Environmental Mathematics"

Ben Fusaro, Salisbury State University

--> The Remaining Workshops are Sponsored by VMATYC. They are subsidized by the Commonwealth of Virginia for mathematics teachers and thus have no charge. They are open to both MAA and VMATYC members as long as there is room.

1:00-2:50 #1 "How can a TI-82 Graphing Calculator Enhance  
Precalculus, Calculus or Linear Algebra"  
Pat Taylor and Cathy Hoffmaster, TNCC

#2 "Writing in Math Class"

Judy Williams, Elsie Harris, Jeannie Heimlich, Sybil Macbeth  
and Charlotte Newsom, TCC

3:30-5:20 #1 "Creating Graphics Calculator Activities for College Algebra"  
Donna Jovanovich and Gwen Turbeville, TCC

#2 "Applications of DERIVE in Precalculus and Calculus"

Frank Carver, Blue Ridge CC, Cathy Hoffmaster and Pat Taylor,  
TNCC. Participants are invited to share ways in which they have  
used DERIVE in the classroom.



## VIRGINIA AIR AND SPACE CENTER

600 Settlers Landing Road  
Hampton, Va.

- 6:30 Registration, Cash Bar
- 7:00 Opening Remarks:  
**Dr. Shirley R. Pippins, President**  
Thomas Nelson Community College
- Informal Buffet Supper and access to all of the museum exhibits.
- 9:00 Showing of the IMAX film, "Destiny in Space"
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### SATURDAY, APRIL 8

TNCC CAMPUS: HASTINGS HALL, 2nd FLOOR

7:30 - 10:00 am --- Registration and Continental Breakfast

7:45 - 8:30 -- Meeting of **MAA Campus Representatives**, Room 400.  
Bring your breakfast and join in on a discussion led by Genevieve Knight, Coppin State College and Dan Kalman, American University.

8:00 - 1:00 -- Book Sales and Displays in Room 437.

### CONTRIBUTED PAPERS

#### 8:40 - 9:05 -- Session I

- ROOM 402: George Webb and Fred Hartline, Christopher Newport University  
"A Classroom Communication System for Real-Time Assessment of Student Understanding and of Teaching Effectiveness: A Demonstration With Applications in Mathematics"
- ROOM 406: John Carl Panetta, Old Dominion University  
"Cycle-Specific Chemotherapy and Growth Factors: A Mathematical Model"
- ROOM 408: Wing Man Kwok, Christopher Newport University  
"Association Schemes Defined by Classical Groups"
- ROOM 416: Przemyslaw Bogacki, Old Dominion University  
"Computer Activities For Calculus Using MathCad"
- ROOM 422: Richard Stark, St. Mary's College of Maryland  
"A Sequence That Defines the Arcsine"
- ROOM 400: Hongwei Chen, Christopher Newport University  
"Poisson Formula Revisited"

9:15 - 9:40 -- Session II

- ROOM 402: Brian Bradie, Christopher Newport University  
"An Introduction to Wavelet Packets"
- ROOM 406: Jiashi Hou, Old Dominion University  
"Mathematics in Biomechanics Research"
- ROOM 408: Bill Spohn, Retired, Johns Hopkins Univ. Applied Physics Lab.  
"Pythagorean Triples: Angles, Series, Sequences, Matrices"
- ROOM 416: Betty Mayfield, Hood College  
"Raindrops Keep Fallin' on My Head: Computer Labs For Calculus"
- ROOM 422: Dipa Choudhury, Loyola College in Maryland  
"Relearning Calculus"
- ROOM 400: Wayne Patty, Virginia Tech  
"A Restructured Precalculus Course for High Schools and Colleges"

9:50 - 10:15 -- Session III

- Room 402: Students: Sandra Henson, Mary McCoy, Jennifer Traglia, Salome El-Wallace.  
Advisor: A. Tannouri, Morgan State University  
"Experiences With Modeling Using Maple"
- ROOM 406: John A. Adam, Old Dominion University  
"Mathematical Models and Metaphors of Tumor Growth and Vascularization"
- ROOM 408: Laxman Hegde, Frostburg State University  
"Statistical Distance"
- ROOM 416: Students: Julie Ayres, Jennifer Fisher, Elizabeth Kyle, Hood College.  
Advisor: Betty Mayfield  
"Spirographs and the Chambered Nautilus: Using the Computer in Calculus"
- ROOM 422: William Abrams, Longwood College  
"An Eclectic Approach to the Senior Seminar"
- ROOM 400: Joint MAA - VMATYC Session (10:00 to 10:50):  
"Standards for Introductory College Mathematics"  
Panel: Jon Scott, Montgomery College, Elizabeth Teles, NSF  
Jon Wilkin, NVCC, Susan Wood, JSRCC, Martha Clutter, PVCC

10:25 - 10:50 -- Session IV

- ROOM 402: James Sochacki, James Madison University  
"A New Look At Picard Iterates For Ordinary Differential Equations"
- ROOM 406: John Nolan, American University  
"Genetically Complex Diseases"

ROOM 408: Carla Schultes, Salisbury State University  
"The Shortest Distance Between Two Points May Not Be A Straight Line"

ROOM 416: Student: Brooks Williston, Hood College  
Advisor: Betty Mayfield  
"How Does It Do That? A student's view of computer-based equation solving techniques"

ROOM 422: Judy Remsburg, Thomas Nelson Community College  
"The Regional Summer Math and Science Institute: A Business, College and School Partnership"

ROOM 400: Continuation of Session III

11:00 - 11:25 -- Session V

ROOM 402: G. Edgar Parker, James Madison University  
"What Your Differential Equations Course Might Be"

ROOM 406: Misrak Gezmu, Norfolk State University  
"An Up and Down Design For Truncated Groups"

ROOM 408: Parviz Khalili, Christopher Newport University  
"A Recurrence Relation For The Riemann Zeta Function"

ROOM 416: Student: Rachel Paine, Hood College  
Advisor: Betty Mayfield  
"My Adventures in the Land of SPSSx"

ROOM 422: Mathematical Modeling Contest Problem

ROOM 400: Ben Zirkle, Va. Western Community College  
"Real Precalculus" (11:00 to 11:50)

11:35 - 12:00 -- Session VI

Room 402: Student: Garrick Evans, James Madison University  
"Machine Implementation Of The Picard Process"

ROOM 406: Bruce Murrie, U.S. Dept. of Education  
"Sampling Proportions and Percentages of Student Loan Borrowers"

ROOM 408: Dan Kalman, American University  
"Linear Algebra and the Irrationality of the Square Root of Two"

ROOM 416: Student: Beth Stockslager, Hood College  
Advisor: Betty Mayfield  
"Population Survival Rate of the Bald Eagle"

ROOM 422: Mathematical Modeling Contest Problem

ROOM 400: Continuation of Session V

12:10 - 1:10 -- MAA BUSINESS MEETING, Diggs Hall, Room 100

1:30 -- MAA and VMATYC Joint Lunch and Invited Speaker:

**DR. CHRISTOPHER SCHAUFELLE**

**"Earth Math: Precalculus With An Environmental Focus"**

Location: Omni Hotel, 1000 Batten Bay Blvd, Newport News

Directions: I64 to exit 258A onto J. Clyde Morris Blvd.

Turn right at first stop light onto Diligence Drive.

Take the first right onto Omni Way.

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### Workshop Descriptions

#### **A Mathematics Educator's Guide to the Internet**

Jon W. Scott, Montgomery College

Elizabeth J. Teles, National Science Foundation

The explosive growth of and increased accessibility to the Internet present new challenges and opportunities for mathematics education. Beyond e-mail, there are expanding numbers of mathematical and educational resources available almost instantaneously on-line. The purpose of this interactive workshop is to provide mathematics faculty an awareness of these resources, the skills to locate and retrieve them, and some ideas of how one might use these resources for both professional development and mathematics classes.

The main focus will be on locating information of mathematical interest. We will examine the MAA, AMATYC, AMS, SIAM, and Mathematics Archives gophers, as well as the Chance database for probability applications and the Geometry Forum. Participants will practice various methods for transferring information to local computers -- e-mail, download, and FTP. A portion of the workshop will be devoted to learning and using STIS (Science and Technology Information System), the gopher and database of the NSF.

Limit: 20 participants. Register early!

#### **Mathematics Archives**

Przemyslaw Bogacki, Old Dominion University  
(Calculus moderator, Mathematics Archives)

Participants in the Internet workshop who wish to explore the Mathematics Archives in greater depth are invited to this short workshop following it.

The goals of the Mathematics Archives include providing the mathematics community with access to software and other materials which are contained on the Internet and which can be used in the teaching of mathematics at the community college, college and university level. After a brief introduction to the Archives, the participants in the workshop will have a hands-on opportunity to access the Archives via FTP, gopher, and WWW.

#### **Environmental Mathematics**

Ben Fusaro, Salisbury State University

This workshop will develop a simple modeling procedure that is especially useful for analyzing natural systems. The procedure begins with a suggestive diagram and a qualitative solution. It then moves to a *flow equation* (a DE in disguise), a numerical solution and ends with a conventional function display. Nothing is required beyond high school algebra. The materials provided can be used in a general education or "baby" modeling course (4-6 weeks) or in a standard modeling course (2-3 weeks).



## SPRING MEETING REGISTRATION FORM

Please complete and mail to **Jon Scott, Department of Mathematics, Montgomery College, Takoma Park, MD 20912** by March 25th.

Name(s) \_\_\_\_\_

(indicate if guest) \_\_\_\_\_

Affiliation (for nametag) \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone \_\_\_\_\_ e-mail address \_\_\_\_\_

Are you a member of the MAA? \_\_\_\_\_ ☐ First-time attendee

\_\_\_\_\_ Meeting registrations @ \$5.00 . . . . . \_\_\_\_\_

\_\_\_\_\_ Student registrations @ \$5.00 (includes lunch) . . . . . \_\_\_\_\_

\_\_\_\_\_ MAA Workshop registrations @ \$10.00 . . . . . \_\_\_\_\_

☐ Internet ☐ Environmental mathematics

[No charge for VMATYC workshops, but please pre-register here]

☐ TI-82 graphing calculator ☐ Writing in math class

☐ Graphics calculator activities for college algebra

☐ DERIVE in precalculus and calculus

\_\_\_\_\_ Tickets for Friday night at Virginia Air and Space Museum @ \$20.00 . . . . . \_\_\_\_\_

Includes museum, buffet, and IMAX film.

Buffet: Meat balls, ham and cheese croissants, fresh seasonal fruits and assorted cheeses, fresh vegetables and dip, assorted desserts, coffee, tea, soft drinks. Cash bar.

\_\_\_\_\_ Tickets to the Saturday lunch @ \$13.00 . . . . . \_\_\_\_\_

Choose one:

☐ Chicken Marsala (boneless breast of chicken with prosciutto, mushrooms, and marsala wine, served over pasta)

☐ Beef Burgundy (served with egg noodles)

☐ Vegetarian dish (includes a pasta dish)

All entrees include tossed salad with raspberry vinaigrette and creamy ranch dressing, fresh seasonal vegetables, warm rolls and butter, cappuccino mousse cake, coffee and tea.

TOTAL . . . . . \_\_\_\_\_

Please make checks payable to MAA.

## MAA Student Chapters

There are now seven student chapters in Maryland (Coppin State, Goucher, Hood, Loyola, Morgan State, Salisbury State, and Towson), three in the District of Columbia (Catholic, Georgetown, and Trinity), and fourteen in Virginia (Emory and Henry, George Mason, Hampden-Sydney, James Madison, Liberty, Mary Washington, Mary Baldwin, Marymount, Old Dominion, Virginia Commonwealth, Virginia Polytechnic Institute, Virginia State, Virginia Wesleyan, and Washington and Lee). Our newest student chapter was formed this year at Randolph-Macon College in Ashland, Virginia. Advisor Eve Torrence reports that Jonathan Jedwab of Hewlett-Packard labs in the UK was visiting at the University of Richmond this year and gave a guest lecture at the Randolph-Macon student chapter. They have also had a pizza dinner and is selling fractal T-shirts to make money.

Student chapter coordinators for our Section are Kathleen Shannon and Andy Vogt. (See their addresses on the back of the newsletter.)

## Mathematics Awareness Week April 23-29, 1995 Mathematics and Symmetry

Mark your calendars now and plan to observe Mathematics Awareness Week in your area, institution, or organization. With the theme of Mathematics and Symmetry, MAW provides an excellent opportunity to celebrate the beauty and complexity of the mathematical sciences. Now more than ever a wider audience needs to be exposed to the power and complexity of mathematics -- from the creation and discovery of new mathematics, to its beauty in symmetry, to its myriad of uses in everyday life. Please do your part to promote public awareness of mathematics from Sunday, 23 April to Saturday, 29 April 1995.

## Lodging for Spring Meeting

All of the hotels and motels listed are within a half-mile of each other (same exit off I64), and approximately five miles (10 minutes drive) from TNCC.

A block of rooms has been reserved at each of the following hotels for Friday and Saturday nights. Mention the MAA when calling to get the special group rate. Deadline for special rates: March 17. Each of these is a full-service hotel with restaurant and lounge. (Note: Saturday's luncheon is at the Omni.) Add 8.5% local tax to all rates.

Omni Newport News Hotel  
1000 Batten Bay Blvd.  
Newport News, VA 23606  
1-800-THE-OMNI  
1-804-873-6664  
Single or double: \$61.00

Ramada Inn & Conference Center  
950 J. Clyde Morris Blvd.  
Newport News, VA 23601  
1-800-841-1112  
1-804-599-4460  
Single or double: \$46.00

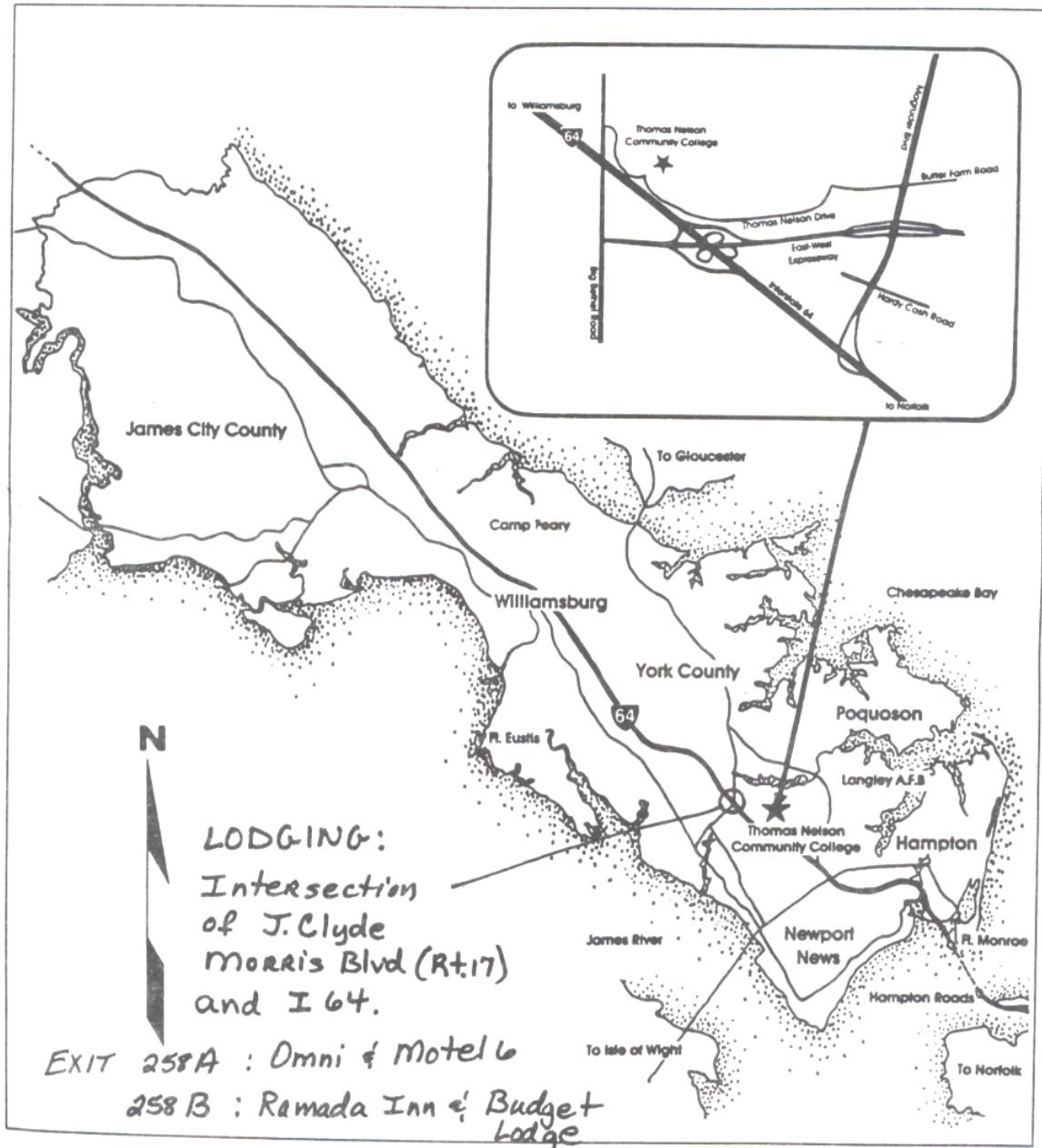
No rooms have been reserved at the following motels. Call early for availability. Neither has a restaurant; however, there are many eating establishments in the vicinity.

Budget Lodge  
(next to the Ramada Inn)  
1-804-599-5647  
Single: \$36.95  
Double: \$42.95

Motel 6  
J. Clyde Morris Blvd.  
1-804-595-6336  
Single: \$25.99  
Double: \$29.99

### Location

The main campus of the college is located in Hampton, Virginia, at 99 Thomas Nelson Drive, immediately east of Big Bethel Road and the I-64 overpass. Butler Farm Road provides access to Magruder Boulevard, I-64, and Armistead Avenue. Coming Eastbound on I-64 (from Williamsburg), there are two options: **Exit 261A**, Hampton Roads Center Parkway (to Big Bethel Road, then right), or **Exit 261B** Hampton Roads Center Parkway (to Magruder Blvd.), then left. Coming Westbound on I-64 (from Norfolk), there are also two options: **Exit 263B** to Magruder Blvd., then left onto Butler Farm Road, or **Exit 261A** (Hampton Roads Center Parkway) to Big Bethel Road, then right. From Poquoson, turn right at the light on Magruder (Rt. 134); there are signs to show how to get to Thomas Nelson. The map below indicates the easiest access routes from all points on the Peninsula.



**The Virginia Air  
and Space Center**  
600 Settlers Landing Road  
Hampton, Virginia 23669  
(804) 727-0900

### DIRECTIONS

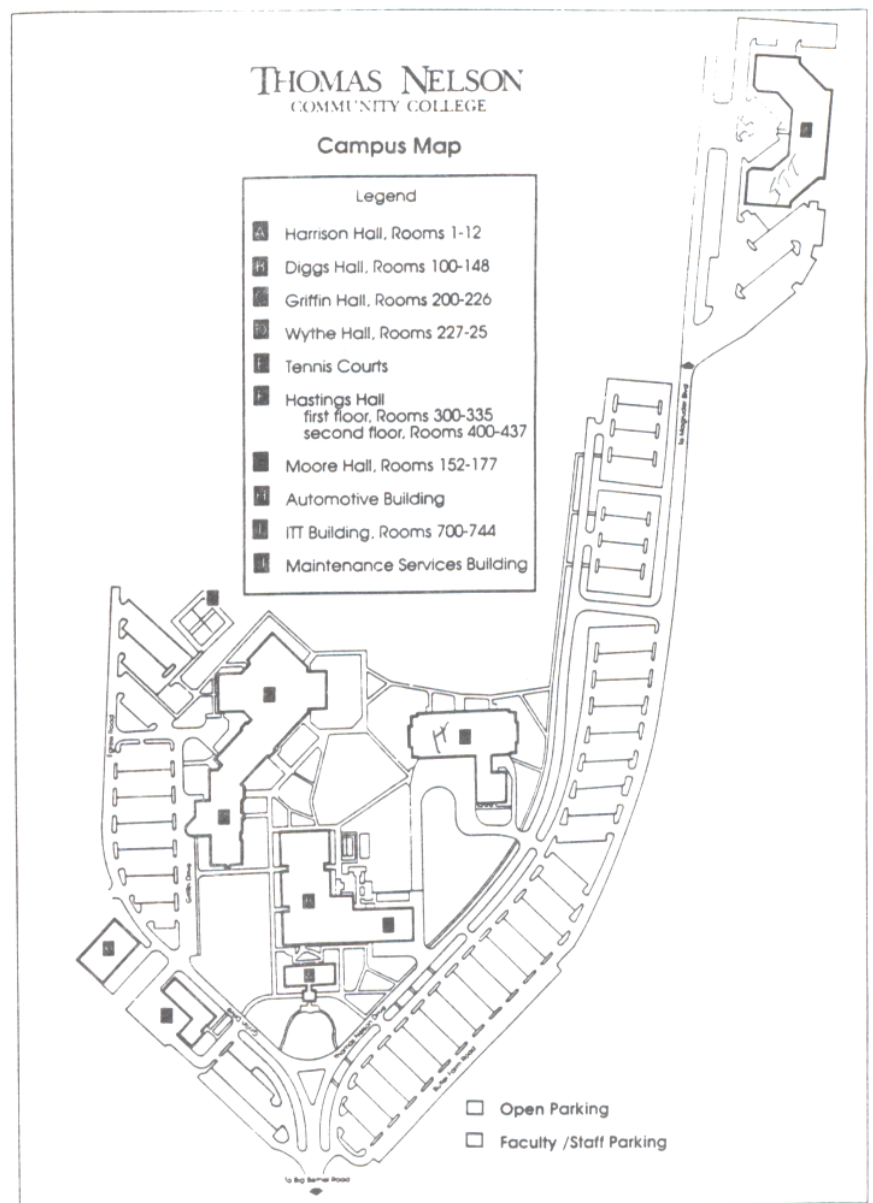
Approaching from the West:  
Take Highway 64 to Exit 267. Turn right at the light onto Settlers Landing Road. Travel 3/4 mile, and look for the Air and Space Center to your left.

Approaching from the East:  
Take Highway 64 to Exit 267. Turn left at the light onto Settlers Landing Road. Travel 3/4 mile, and look for the Air and Space Center to your left.

### PARKING

Two small parking lots (free) are located across the street from the Center. After regular business hours, free parking is also available in nearby bank parking lots. A parking garage is located just past the Center on the right, at the rate of 50 cents per hour.

Park anywhere.  
Follow signs to preferred  
parking areas.





**The MD-DC-VA Section of the MAA**  
Will Sponsor a Workshop at

**FROSTBURG STATE UNIVERSITY**  
in the Mountains of Western Maryland

**MATHEMATICS LABORATORIES with DERIVE**

**5 - 9 JUNE 1995**

**Drs. Marvin Brubaker and Carl Leinbach.** The presenters have worked directly with the creators of Derive and have given a succession of successful regional and national workshops exploring its' use in the classroom.

- MON** Getting Comfortable with DERIVE:  
Algebra, Precalculus and Elementary Number Theory.
- TUE** DERIVE in First Year Calculus.
- WED** Multivariable Calculus and Linear Algebra.  
Introduction to ACROSPIN, an Inexpensive 3-D Display Package.
- THU** Advanced Mathematics:  
Differential Equations, Real Analysis and Numerical Analysis.
- FRI** Review of Projects; Implications for the Future.

Intended for college mathematics teachers. The total cost is \$260 *including room and board* (double occupancy). There is a deposit of \$100 for the workshop, refundable until 8 May 1995.

**WORKSHOP CO-DIRECTORS:**

Dr. John H. Biggs 301-689-4181 or 5291  
Dept. of Mathematics  
Frostburg State University  
Frostburg, MD 21532

Dr. B.A. Fusaro 410-543-6470  
Dept. of Mathematics and Computer Science  
Salisbury State University  
Salisbury, MD 21801

## Other summer opportunities

### CODEE Workshop at Stetson University June 8-15, 1995

In conjunction with the Consortium for Ordinary Differential Equations Experiments (CODEE), Stetson University will host a workshop for faculty who are interested in using technology to teach ordinary differential equations. A variety of software will be available for participants to learn and use to create student projects. Hardware will include IBM and Mac PCs and Sun workstations. A diversity of experience among faculty is sought. Room, board, and a \$200 stipend are provided to participants. CODEE consists of the following colleges and universities: Harvey Mudd, Stetson, Cornell, St. Olaf, Rensselaer, Washington State, and West Valley. For more information and an application form, contact one of the organizers. You can also get information on the World Wide Web by accessing <http://thoth.stetson.edu/odeworkshop/>

Deadline: March 15 (but check and see if there are still some spots available)

Michael Branton [mgb@thoth.stetson.edu](mailto:mgb@thoth.stetson.edu)  
904-822-7548  
Margie Hale [mhale@macs.stetson.edu](mailto:mhale@macs.stetson.edu)  
904-822-7551

Department of Mathematics and Computer  
Science  
Stetson University  
DeLand, FL 32720

### Calculus Reform Workshop at Ithaca College, June 25-30, 1995

Ithaca College will host a National Science Foundation funded five-day workshop on the use of classroom activities and group projects to teach calculus. The workshop will provide an overview of the calculus reform movement and the experience of working with the materials developed at Ithaca College. A principal aim is to enable a wide range of participants from colleges and universities, two-year colleges, and secondary schools to become involved in these new pedagogical approaches.

Grant funds will provide for room and board. Faculty who teach significant numbers of students from underrepresented groups are particularly encouraged to apply. Applicants will be expected to demonstrate a commitment to use some of the materials in a calculus classroom during the following academic year. There will be a variety of follow-up activities for participants.

For additional information and an application form, contact:

Deane Driscoll Schwartz  
Department of Mathematics and Computer  
Science  
Ithaca College  
1212 Williams Hall  
Ithaca, NY 14850-7284  
[nsfcalc@ithaca.edu](mailto:nsfcalc@ithaca.edu)

**Allegheny Mountain Section  
Short Course  
Fermat's Last Theorem  
June 26-30, 1995**

This five-day workshop at Allegheny College will be given by Fernando Gouvea of Colby College. It will examine the background work necessary to understand the basic mathematics behind the current work in the proof of Fermat's Last Theorem. Topics include:

- Modular forms, the easy part (definition, Hecke operators, eigenforms, L-functions)
- Elliptic curves, the easy part (definition, minimal Weierstrass form invariants, group structure, reduction mod  $p$ , L-functions)
- Elliptic curves, the fancy part (torsion points, Galois representation)
- Modular forms, the fancy part (functional equation for the L-function, the Hecke algebra, Galois representations, the Taniyama conjecture)
- Ribet and Wiles: the Frey curve and its Galois representation, deformation theory and Wiles' theorem.

Course registration will be \$120 and room and board \$140 for a total of \$260. For further information and an application, contact:

George Bradley  
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and Computer Science  
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Pittsburgh, PA 15282  
(412) 396-5115  
bradley@duq3.cc.duq.edu

**Ohio Section Summer Short Course  
Symmetry and Group Theory  
June 15-17, 1995**

This short course at the University of Dayton will be presented by Doris Schattschneider of Moravian College. It will emphasize a visual, hands-on approach to understanding the symmetry groups of two- and three-dimensional objects through the use of computer software, patterns and tilings, polyhedral models, and videotapes. Many abstract concepts encountered in a first course in group theory can be illustrated in a graphic manner using this approach.

Registration fee: \$100. Air conditioned dormitory suites consisting of a living room, bath, and 2 bedrooms with 2 single beds in each bedroom are available with a price per night of: \$20 (half a double), \$40 (single), \$80 (suite). A Thursday evening banquet is available for \$16; other meals may be purchased in the student union. Registration open until forty \$50 deposits are received, or May 15, whichever is earlier.

For more information, or to register, contact

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**Spring 1995 meeting:**  
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