Ronald Graham at Dayton Meeting, March 26-27

The Section meeting at the University of Dayton gets underway with a talk on Friday afternoon by Ronald L. Graham, Chief Scientist Emeritus, AT&T Labs Research, entitled “Mathematics and Computers: Recent Success and Insurmountable Challenges”. The theme of the meeting is “mathematics in business and industry”. He will participate in a panel on that subject on Saturday morning. This should be of particular interest to students attending the meeting.

As has been the case for many years, student activities form a significant part of the spring meeting. Graham’s expertise in juggling, and its mathematics, will also appeal to students, and others alike. A juggling exhibition will be part of the after dinner activities, which includes an ice cream social. The student paper contest winners will also be announced. Students talks are scheduled for Friday afternoon. The student microcourse will be on the history of mathematics, presented by Fred Rickey. More details are on page 9.

The business meeting after the banquet will include the election of officers and the presentation of the Section teaching award. Contributed papers are scheduled for Saturday. Start planning now.

Also on Saturday is a panel on middle school licensure organized by CONTEAC. Festivities will conclude with the Retiring President’s Address, given by Roger Marty. See details beginning on page 8.

The meeting is preceded by the highly successful OhioNExT Workshop, page 7. All details and updates, as well as online registration and contributed papers, will appear on the meeting web page (www.bgsu.edu/departments/math/Ohio-section/Meetings/Spring99/), which is accessible from the Section web page.

Nominations for Section Officers
The Nominating Committee presents the following slate of candidates: Judy Palagallo (U. of Akron) for President-Elect, Bill Friel (U. of Dayton) for Secretary-Treasurer-Elect and Dwight Olson (John Carroll U.) for a three year term on the Program Committee.

The elections will take place at the business meeting, Friday evening, March 26, 1999 after the banquet at the University of Dayton. Nominations may also be made from the floor.

The President-Elect subsequently serves as President, Past-President, and then on the Nominating Committee. The Secretary-Treasurer-Elect subsequently serves as Secretary-Treasurer for a three year term. The senior person on the Program Committee is chair.

Barbara Ashton
Chair, Nominating Committee

President’s Comments
At the Fall 1998 Section Meeting the Executive Committee of the Section approved changes in the fee structure for registration at Section meetings. The new fees are $15 for non-students who are employed full-time, $5 for non-students employed less than full-time, and $0 for undergraduate and for graduate students. Also a proposed change to split the position of secretary-treasurer into two positions was discussed. As a result of discussions within the Section, I have appointed Sherri Brugh to be an assistant to the Secretary-Treasurer.

Bill Friel was kind enough to agree to represent the Section at a meeting in San Antonio of the Ad Hoc Committee on Section Booksales. The representatives discussed new procedures for conducting MAA booksales at section meetings.

(Continued on page 7)
Section Governor’s Report

The MAA Board of Governor’s Meeting at the 1999 Annual Winter meeting in San Antonio was held on Tuesday, January 12 from 9:00 a.m. until 4:30 p.m. A number of items were discussed that I would like you to be aware of, although most of these subjects are available elsewhere, particularly on the MAA website.

The Board approved the site for the 2000 Summer Mathfest. It will be held in Los Angeles at UCLA on August 3-5 of that year. Other meetings that have been approved by the Board are the Summer MathFest in Providence set for July 31 through August 2 of 1999, Washington D.C. scheduled for January 19-22, 2000, New Orleans for January 10-13, 2001, and San Diego for January 6-9, 2002. All of the January meetings will be held, as traditional, with AMS, and SIAM will join us for the 2000 Joint Meetings. With regard to meetings, the Board also approved the following motion “The MAA approve in principle to have MathFests after the year 2000 with the proviso that summer meetings be fiscally sound.” In recent years there has been regular discussion regarding the fiscal feasibility of the Mathfests and the advisability of their continuance. Some members of the Executive Committee were concerned that the meetings might be too much of a drain on the finances of the Association, although this has not occurred in the Atlanta or Toronto Mathfests. At the Board meetings I have attended, the Governors have overwhelmingly expressed their support for the Mathfests as an important activity of the Association. This motion will permit the MAA site selection committee to do its work well in advance of the meetings, and should result in better coordination with the meetings of other mathematics organizations.

The major point of discussion at the Board of Governor’s meeting concerned the steady decrease in the number of Regular Members of the MAA and plans to counteract this trend. In my initial meeting with Department Chairs and Liaisons at the Fall 1997 meeting of the Ohio Section, I discussed with Liaisons my hopes that they would assume a more active role in the recruitment and retention of MAA members in their collegiate and geographical area. It is, in my view, extremely important to the Association to have an active and vibrant membership, and that can be accomplished most effectively by maintaining close contact with the membership at the local level. At that time I appointed Tom Price as Liaison Coordinator of the Section, and he has done an excellent job in a position that is, at best, vaguely defined. Tom has created a very informative website at zippysun.math.ukron.edu/~tprice/MAA/ which I think you will find quite informative. I am also pleased to report that many of our views have been adopted by the National MAA leadership. A position paper concerning this subject is on MAA Online at http://www.maa.org/data/mbsvcs/kalman.html. The MAA is particularly interested in preparing the Association for changes in the future. A list of questions was given to the Board for consideration and input. Since I am a particularly poor crystal ball gazer, I would appreciate hearing your views regarding these items. You can e-mail responses to me at faires@math.ysu.edu The questions are:

1. What are your assumptions about the future as they relate to the mathematics profession?
2. What do you see as the single biggest problem facing the MAA over the next three years?
3. If you had to pick one thing for the MAA to achieve over the next three years on behalf of the profession, what would it be?
4. If you had to pick one thing for the MAA to achieve over the next three years on behalf of its individual members, what would it be?

There were a number of other items of general interest that were discussed at the meeting. Marcia Sward, the Executive Director of the MAA will retire at the end of 1999 and a committee headed by former President Ken Ross has been created to find a replacement. A new accounting system has been installed by Finance Director Neil Bernstein, and the finances of the MAA now seem to be quite stable. The MAA publications under the direction of Don Albers have been particularly active. Included in the new releases is an excellent short work on Euler’s mathematics by Bill Dunham. I read the first third of the book on my trip home from San Antonio and found it to be as entertaining and educational as his Great Theorems book. The American Mathematics Contests committee has been approved to create a new examination for students in 9th and 10th grade. This test will be given parallel to the American High School Mathematics Examination and should provide a better experience for younger students than they presently receive from the AHSME, which includes material that to which they have not been exposed. Titu Andreescu has been appointed Director of the American Mathematics Competitions, succeeding the long-time Director Walter Mientka, who has resigned to become the Executive Director of International Mathematics Olympiad 2001, Inc. This organization that has been formed for the purpose of conducting the International Mathematics Olympiad in the USA in the year 2001.

I encourage you to visit the MAA website at http://www.maa.org There is a tremendous amount of interesting material at the site and it is changing constantly. In particular, take a look at the Columns and Reviews sections, which are the most popular.

There were many other interesting items that I would be happy to share with you. I am including the agenda for the meeting with the Web copy of this report. I see anything on it that you would like me to discuss, please let me know. See you at the University of Dayton on March 26-27.

Doug Faires
Section Governor

Ohio Focus

The newsletter of the Ohio Section of the Mathematical Association of America, which first appeared in 1973, is published twice yearly in time to reach members before the fall and spring meetings.

Editor:
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Deadline for next newsletter is August 31, 1999
Email copy preferred.

This information will also be posted, and updated, on the Section web page. Access from MAA On-Line or at URL http://www.bgsu.edu/departments/math/Ohio-section/
David E. Kullman  
MAA Meritorious Service Award
Every 5 years the Section may nominate someone for one of the MAA Meritorious Service Awards. The award was presented at the January meetings in San Antonio.

David Kullman’s Response
In my thirty years as a member of the Ohio Section, I have acquired many excellent teaching ideas and been stimulated mathematically by numerous outstanding speakers and authors. Most importantly, I have come to know many other mathematicians as professional colleagues and personal friends. Whatever service I have rendered to the Section and the Association has been a small repayment for the countless benefits I have received. I feel proud and deeply honored to be awarded this Certificate of Meritorious Service, and I look forward to many more years of active membership in the MAA.

About David
David grew up in Kenosha, Wisconsin, where his high school geometry teacher, Mr. Moebius, convinced him to pursue a career in mathematics instead of engineering. He earned a B.A. in mathematics at Northwestern University, graduating with honors in 1962. He then spent a year as a Shell Merit Scholar at Cornell University, where he received his M.A. in mathematics education.

David taught mathematics and physics for two years and also coached the “Mathletes” at Evergreen Park High School, near Chicago. He recalls the department chairman once telling him, “If you want to go to graduate school and earn a ‘real’ Ph.D. in mathematics, I’ll write a good letter of recommendation for you.” So in August, 1965, he and Karen, his bride of two months, set out for Lawrence Kansas, where Dave had been awarded a teaching assistantship in the Department of Mathematics.

After writing a dissertation in point-set topology and completing his Ph.D. in 1969, David accepted an assistant professor position at Miami University. He says he was impressed with the faculty and students there, and the chairman, Elwood Bohn, wouldn’t take “no” for an answer. Dave’s never regretted that decision.

David was promoted to full professor in 1981, and he’s been the department chair since 1993. His current research interests lie in the area of history of mathematics, and he’s also heavily involved in programs for K-12 mathematics teachers. He has been director or co-director for nine of the annual Miami Mathematics and Statistics Conferences, and he also led Miami’s Junior Scholars Program, for high school students, during its first twelve years.

David served as Ohio Section Newsletter Editor from 1982-87 and as Section President in 1991-92. In between, he served a two-year term as President of the Ohio Council of Teachers of Mathematics. He represented Ohio on the MAA Board of Governors from 1994 to 1997. Currently he is a member of the MAA Committee on the Mathematical Education of Teachers (COMET) and the MAA Task Force on NCTM Standards.

David and Karen have a son who works for the Cincinnati Reds, a daughter who is a travel agent in Chicago, and one grandson. David’s hobbies include model railroads, antique tractors, and gardening.

From the Editor/Webmaster  
Section History Online
The Ohio Section, 1915-1990 has been put on the web page, complete with a group photo of the second annual meeting, April 6, 1917. There is also a list of charter members along with lots of interesting facts: by-laws, lists of officers, meeting dates and sites, short courses and invited addresses.

The committee that wrote the history, under the guidance of David Kullman, consisted of William Beyer, Will Hahn, Gus Mavrigan, and Fred Rickey. An updated edition is planned.

Newsletters of Other Sections
As editor, I get copies of the newsletters of other sections mailed to me. They come in all shapes and sizes, and there is a lot of interesting stuff in them about section activities and the different (and similar) ways of doing things.

I will bring the copies that I have to our section meetings and place them in the registration area. Feel free to browse, or even take one—especially if you are an officer or committee person looking for ideas.

Form of Submissions for Newsletter and Web Site.
I can handle almost any format that you might send me, but please do not send Word documents, at least versions above Word 5. Output as RTF from Word is OK.

Plain text via email is preferred, since that is what I will convert to for both the newsletter Pagemaker file and the HTML code for the web site.

Conversion is much more difficult with the new file formats. But more importantly I am not willing to expose myself to the new Word macro viruses.

Ed.
**1998-1999**

**Ohio Section Officers and Committees**

**ELECTED OFFICERS**

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President-Elect
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Past-President
Leo Schneider, John Carroll
216-397-4481
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Section Governor
Douglas Faires, Youngstown State
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Secretary-Treasurer
Janet Roll, Findlay
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OhioMAA Liaison to OCTM and
OCTM Liaison to OhioMAA
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wallach@lucy.findlay.edu


**COMMITTEES**

* denotes committee chair. The elected officers and these committee chairs are the voting members of the Executive Committee. Terms expire at the end of the spring meeting of the year listed. See the Bylaws.

Program Committee:
Harold Putt• Ohio Northern 1999
419-772-2351, Fax: 772-2330
h-putt@onu.edu
Thomas Gantner Dayton 2000
Dale Mugler Akron 2001

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stack@mc.s.kent.edu
Mark deSaint-RatMiami Hamilt 2001
Robert Hovis Ohio Northern 1999
Felipe Martins Cleveland State 2001
Danny Otero Xavier 2001
Carol Schumacher Kenyon 2000
Carl Spitznagel John Carroll 2000

Committee on Section Activities (CONSACT)
Bob Dieffenbach• Miami Middlt 2000
513-727-3238, diefferm@muohio.edu
Thomas Dence Ashland 2000
John Holcomb Youngstown St. 2001
Darrell Horwath John Carroll 2000
Renee Koplon Wright State 1999

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(CONSTUM)
Barbara D’Ambrosia• John Carroll 2000
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bdambrosia@jcvaxa.jcu.edu
David Cusick Marshall 2001
Paula Gnepp Cleveland State 2001
Diane Groth Findlay 1999
James Sellers Cedarville 2001
Brian Shelburne Wittenberg 1999
Gordon Swain Ashland 2000

Committee on Teacher Education and Certification (CONTEAC)
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or dperley@bright.net
David Flaspohler Xavier 1999
Phil Huneke Ohio State 2000
Richard Laatsch Miami 1999
David Meel Bowling Green 2001
Sherwood Silliman Cleveland St. 2000
Cathy Stoffer Ashland 2001

Nominating Committee:
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937-327-7860, bashton@wittenberg.edu
John Michel Marietta 2000
Floyd Barger Youngstown 1999

Committee on Contests:
Bill Higgins Wittenberg AJHSME
David Stenson John Carroll AHSME

ByLaws Committee
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216-397-4685, djh@jcvaxa.jcu.edu
J. William Friel Dayton

Teaching Award Committee
Leo Schneider* John Carroll
Janet Roll Findlay
Thomas Hern Bowling Green
John Lancaster Marshall

Local arrangements for meetings:
Spring 1999: Dayton
J. William Friel, 513-229-2511,
friel@saber.udayton.edu
Fall 1999: Wooster
Charles Hampton, 330-263-2486,
hampton@acs.wooster.edu
Spring 2000: Marshall
Ari Aluthge, 304-696-3050
aluthge@marshall.edu
Fall 2000: Wittenberg
Brian Shelburne
bjs@wittenberg.edu
Mathematics Awareness Month  
April 1999

In preparation for Mathematics Awareness Month, April 1999, the Joint Policy Board for Mathematics is pleased to announce that Texas Instruments Incorporated has been named as the official sponsor of this year’s event, Mathematics and Biology.

Mathematics Awareness Month provides the mathematical sciences community opportunity to promote the importance and versatility of mathematics and its relationship to our daily lives. Texas Instruments and the JPBM invite you to use the MAM 1999 materials and the resources available on the MAM website to inform your colleagues, students, and the public about the value of mathematics. The URL is http://forum.swarthmore.edu/mam.

Mathematics is an essential element in fields as diverse as medicine, the human genome, epidemiology, and research analysis. As a representation of Mathematics in Biology, the 1999 Math Awareness Month poster (available on the web page) depicts the electrical activity of a normal heart as if it were stimulated at a single point. Color is used to highlight the arrival time of the electrical signal as it propagates through the heart. The rectangular domain represents a large slab of the ventricular wall, and all domains use geometry and fiber orientation that are taken from anatomical data. Without mathematics there is no other way to view this three-dimensional concept. For a more detailed article on mathematics in heart research please visit the web page.

Mathematics Awareness Month is an excellent time to communicate with new audiences about the relevance of mathematics in their lives. Please help share Mathematics Awareness Month by posting announcements and reports of MAM activities on our mailing list at the web site.

Texas Instruments Incorporated, JPBM and its member societies — the American Mathematical Society, the Mathematical Association of America, and the Society for Industrial and Applied Mathematics — appreciate the involvement of the American mathematical sciences community in Mathematics Awareness Month.

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Campus News

Bowling Green State University
Alexander Ivanov of Imperial College, London, will be visiting in spring, and BGSU will host an NSA-funded Midwest Group Theory Conference, April 9-10, 1999, on Groups and Geometries in his honor.

Cleveland State University.
Sherwood Silliman is the new chair, replacing Bhushan Wadhwa. Luiz Felipe Martins has been granted tenure and promoted to Associate Professor.


John Carroll University
Patrick Chen is on leave during Spring, 1999. Carl Spitznagel was the recipient of the 1998 Lucretia Culicchia Award, a college-wide award for excellence in teaching.

Marshall University

Miami University
Robert Davis, Heather Hulett, and Kyoungah See have been granted tenure and promoted to the rank of Associate Professor, effective July, 1999.

Mark Smith and Dennis Burke are on sabbatical leave this semester. Professor Gue Myung Lee, of Pukyong National University in Korea, is visiting the department this year. Dr. Lee’s research specialty is vector optimization.

University of Akron
Douglas Cameron retired last summer. Doug spent his last few years at the as the Assistant Chair. Jerry Young and Wolfgang Pelz were appointed as Coordinators of the Applied Mathematics and Computer Science Divisions respectively.

Dr. Jeff Adler, University of Chicago, joined the departmental faculty as an Assistant Professor of Mathematics last fall. Mike Scherger was appointed Visiting Instructor of Computer Science. Two students presented their undergraduate honors projects at the Student Poster Session of the meeting in San Antonio. Judith Palagallo directed both projects.

A grant from the MAA/Tensor Foundation for “Mentoring Women in Mathematics”, a program to encourage university women to study mathematics, was used to establish the monthly programs “Mathematics afternoon for women.” Faculty involved in this program are Laura Gross, Judy Palagallo, Linda Saliga and Ethel Wheland.

University of Cincinnati
Christopher McCord received the Charles Phelps Taft Award for Distinguished Faculty from the McMicken College of Arts & Sciences.

Edward Merkes has retired.

University of Toledo

New chairman is Lamar Bentley, replacing Harvey Wolff. En-Bing Lin is Associate Chair.

Violet B. Davis, who taught at U.T. from 1946 to 1975, died on October 14, 1998 at the age of 88.

Youngstown State University
Professors Zbigniew Piotrowski and Steven Kent will be taking sabbaticals during the 1999-2000 year. Dr. Piotrowski will be writing a monograph on separate and joint continuity.
Abstract: This minicourse will examine the mathematics of the perfect shuffle, a permutation often used by mathematicians, magicians and computer scientists for seemingly different ends. The perfect shuffle has broad appeal because of its interesting mathematics and surprising applications to magic tricks and computer design. Most of the mathematics should be accessible to anyone who has studied a semester of discrete mathematics. The basic shuffle and several generalizations will be introduced, and the group structure generated by the perfect shuffle will be explored. Participants will be taught several card tricks using different properties of the perfect shuffle. The course will conclude with a study of computer circuits using the perfect shuffle interconnection.

Biographical Sketch: S. Brent Morris earned his Ph.D. in Mathematics under Leonard Carlitz at Duke University in 1974 and later his M.S. in Computer Science at John Hopkins University in 1980. He has the only known doctorate in the world on card shuffling, entitled “Permutations by Cutting and Shuffling, A Generalization to Q Dimensions.” Morris is the author of many articles. Since 1975 Morris has been employed by the National Security Agency (http://www.nsa.gov). He supported himself in college as a magician. He served as Governor-at-Large of the Mathematical Association of America (MAA), as a member and past chair of the Joint Committee on Employment Opportunities, as a Distinguished Lecturer for the Association of Computing Machinery and as a Visiting Lecturer for the MAA and the Society of Industrial and Applied Mathematicians. He has given invited talks at the Smithsonian Institution, NASA Goddard Space Flight Center, AT&T Bell Labs, the Annual Joint Mathematics Meetings and over 100 colleges and universities.

Expenses: The registration fee is $125. It includes a copy of Morris’ book, Magic Tricks, Card Shuffling and Dynamic Computer Memories (http://www.maa.org/pubs/books/cards.html). The U.S Playing Card Company [located in Cincinnati] will donate a deck of cards for each participant. A $25 deposit should be sent in as soon as possible. Final deadline is May 28. Enrollment is limited to 35 participants.

A registration form is printed below, and on the web page (http://miavx3.mid.muohio.edu/~rdieffenbach/shortcourse.htm). Questions: Contact Bob Dieffenbach, Miami University Middletown, Middletown, OH 45042 Phone (513)-727-3238, FAX (513)-727-3367, Email: diefferm@muohio.edu.

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OHIO SECTION SHORT COURSE REGISTRATION FORM

Name_________________________________________ Nickname (for badge)______________________________

Institution_______________________________________ E-mail____________________________________

Mailing Address----------------------------------------------------------------------------------

Phone (home)_____________________________________ (office)_____________________________________

Lodging: Will stay at an area motel ____ Send information _____

Dormitory room(s) (air-conditioned) ______ Single ($24 per night) ____________ (Number)

Male ____ Female ____ Double ($19 per person per night) ____ (Number of people)

Tuesday_____Wednesday____ Thursday_____ Friday____(June 22-25, 1999)

Please check if you would attend a Thursday evening banquet ( ~ $20 ) : Yes______ (Number) No____

A $25 deposit is required. Checks should be payable to “Ohio Section Short Course.”
Send to: Bob Dieffenbach, Miami University Middletown, Middletown, OH 45042. Phone: 513-727-3238, Fax: 513-727-3367
Phone: 513-727-3238, E-mail: diefferm@muohio.edu
A full program of OhioNExT workshop activities will be held Thursday evening and Friday morning, March 25-26, preceding the Ohio Section spring meeting at the University of Dayton. This workshop will be the fifth since the founding of the Ohio Section’s local version of the national Project NExT for new faculty members. The Ohio Section will provide housing for NExT Fellows on Thursday night and meals during the workshop. Activities begin with a banquet at 7:00 p.m. on the Dayton campus. Friday morning, after a continental breakfast on campus, workshop activities begin at 8:45 a.m. Leading off will be short talks by three OhioNExT fellows on their mathematical research activities. Following the short talks, there will be two major workshop sessions. Details about speakers and topics, as well as a detailed schedule of activities will soon appear on the Ohio Section webpage and will be sent to all NExT Fellows.

The NExT workshop at last fall’s meeting at Columbus State was very successful. Twelve fellows and four mentors took part. Short talks by three fellows on their mathematical research activities were given by Tom LaFramboise (Marietta), Jonathan Rubin (Ohio State), and Gordon Swain (Ashland). There were two major workshop sessions. David Stone (Georgia Southern University) presented a session titled “Lessons and Examples from Thirty Years of Teaching Mathematics.” Todd Will (Davidson College) presented a workshop session about resources on the Web for teaching mathematics. Photos of workshop speakers and participants can be viewed on the Ohio Section webpage.

There are now more than thirty OhioNExT fellows, and about half are also national NExT fellows. To be eligible, the only requirements are that a faculty member be in her/his first four years of teaching and have a strong commitment to teaching undergraduates. Applications for new OhioNExT fellows are now being accepted. Details and application materials can be found on the Section webpage, or from Barbara Ashton (Wittenberg), e-mail: bashton@wittenberg.edu.

John Michel

Aparna Higgins, would welcome your input on any topic and your help on committees would be appreciated. After all, this is your section. I will see you in Dayton. Roger Marty
Spring Ohio Section Meeting
Preliminary Program
March 26-27, 1999
University of Dayton

All sessions are open to all registrants.

Friday

Noon - 4:30  Registration and Book Exhibits  Miriam Hall
12:15- 1:15 Committee Meetings
(CONSTUM, CONSACT, CONCUR, CONTEAC, Program Committee)
1:30 - 1:45 Welcome and Announcements
1:45 - 2:45 Invited Address:
“Mathematics and Computers: Recent Success and Insurmountable Challenges”
Ronald L. Graham
AT&T Labs Research
2:45 - 3:30 Coffee Break
3:30 - 6:15 Student Paper Session
4:30 - 5:30 MAA Executive Committee Meeting
6:30 - 7:30 Banquet
7:30 - 8:30 Annual Business Meeting
8:30 Ice Cream Social
Juggling

Saturday

8:00 - 10:00 am  Registration and Exhibits
8:00 - 9:00 Coffee and Donuts
8:15 - 9:00 Department Chairs/Liaisons Meeting
9:00 - 10:00 Panel Discussion:
“Mathematics in Business and Industry”
Panelists will include Ronald Graham
9:00 - 10:00 CONTEAC Panel Discussion:
“Licensure in Mathematics for Middle School—What’s Happening?”
Moderator: Delene Perley, Walsh University;
Coffee Break
10:00 - 10:30 Coffee Break
10:15 - 12:00 Student Microcourse:
“A Quick History of the Calculus”
V. Frederick Rickey
United States Military Academy
10:30 - 12:05 Contributed Papers
(Executive Committee Meeting , if necessary)
12:10 - 01:00 Retiring President’s Address
Roger Marty
1:00 pm Closing Remarks/Announcements

Check the web for updates (www.bgsu.edu/departments/math/Ohio-section/).

Mathematics and Computers: Recent Successes and Insurmountable Challenges
Ronald L. Graham

There is no question that the recent advent of the modern computer has had a dramatic impact on what mathematicians do and on how they do it. However, there is increasing evidence that many apparently simple problems may in fact be forever beyond any conceivable computer approach. In this talk I will describe a variety of mathematical problems in which computers either have had, may have or will probably never have a significant role.

About the Speaker
He is a juggler, gymnast, and a polyglot—not to mention a mathematician. A prodigious worker who sits on the editorial boards of 40 journals, Graham is chief scientist emeritus at AT&T Labs Research.

At what was formerly Bell Labs he nurtured some of the top mathematicians and computer scientists in the world. His work in number theory and other realms of mathematics earned him the prestigious Polya Prize in 1972 and membership in the National Academy of Sciences in 1985.

Registration and Banquet Ticket
Use the registration form on page 11, or preferably the interactive form on the meeting web page (or www.udayton.edu/~mathdept/maa/online.htm). Deadline to ensure banquet ticket is March 19. On-site reservations are gladly accepted, but preregistration helps the people doing arrangements. Open to all.

He gives lectures and seminars around the world. He served during the past two years on a high-profile National Research Council committee on cryptography.

The most forceful fosterer of Graham’s thinking was Paul Erdős, whom Graham calls “one of the great problem posers of all time.” They met in 1963, and their first joint paper appeared in 1972. Graham maintained an “Erdős room” in his house for his mentor, who never had a family or steady job but traveled around the world staying with friends. A 1979 paper by Graham helped to popularize the concept of one’s “Erdős number”.

(Excerpted from a profile in Scientific American, March, 1997.)

Call for Contributed Papers
A contributed paper session is scheduled for Saturday morning from 10:30 am to noon.

The theme for this meeting is “mathematics in business and industry” but twenty minute presentations on any topic in mathematics or a related area are encouraged. Reports on projects, research announcements, or anything else you believe would be of interest to those in attendance are welcome. In particular, one of these parallel sessions will be designated as the Kenneth Cummins Teacher’s Corner in memory of Dr. Kenneth Cummins. Reports of classroom innovations or interesting projects will be collected together for this session.

Contributors for all sessions should send a title and a brief abstract by Friday, March 19, 1999 to: Harold L. Putt, Department of Mathematics, Ohio Northern University, Ada, Ohio 45810, e-mail (preferred): h-putt@onu.edu, Fax: 419-772-2330.

The contributed paper program will be posted on the web page prior to the meeting.
CONTEAC Panel

CONTEAC stands for Committee on Teaching and Certification, even though the word now is “licensure” instead of “certification.” In the past, certification was awarded for elementary teaching K-8 and secondary teaching 7-12. The new licensure programs divide things into Early Childhood (PreK-Grade 3), Middle Childhood (Grades 4-9), and Adolescent to Young Adult (Grades 7-12).

Our committee’s recent attention has been on the Middle Childhood where two areas of concentration out of four are required; one of those being Mathematics. Many of the education departments of our schools in consultation with their mathematics department colleagues have recently submitted curricula for such concentrations. These have been a variety of successful proposals. At the spring meetings we plan to explain the requirements for such curricula, give some examples, discuss some of the unique courses offered at different institutions, and also take a look at the national scene through NCATE. Following our presentations we hope to have an open discussion time.

Members of the committee who will be participating are Delene Perley, Chair, Walsh University, Woody Silliman, Cleveland State University, Cathy Stoffer, Ashland University, and David Meel, Bowling Green State University. Other members of the committee include David Flaspohler, Xavier University, Philip Huneke, Ohio State University, and Richard Laatsch, Miami University. We look forward to seeing you.

Delene Perley

Grant for Section Student Activities

An MAA Minigrant of $500 has been awarded to the Section to “develope and promote undergraduate student activity in mathematical activities.”

This grant is made possible by a grant to the MAA from the Exxon Educational Foundation.

T-shirts

CONSTUM will be selling Ohio Section commemorative t-shirts at the spring meeting to help support the student paper contest. So bring a little extra $$ for this must-have piece of apparel. Many thanks to Lisa Walker, a student at Cedarville College, for developing the design on the shirts.

Student Activities

In addition to the regular attractions of Ohio Section meetings, there will be several activities for students during the spring meeting at Dayton. On Friday afternoon, there will be sessions of talks presented by students, followed by a student supper (free). Fred Rickey will present the student microcourse on Saturday morning. Students (undergraduate and graduate) planning to attend the meeting should complete the registration form in the newsletter, or the interactive form on the meeting web page (or at www.cedarville.edu/dept/sm/jas/streg.htm). Registration via the Web is preferred. Making arrangements for student dinners and housing involves considerable effort on the part of the hosts. Students are asked to please honor the commitments they make. Students who will be staying overnight must bring a sleeping bag. Student registration deadline is March 19, 1999.

Barbara D’Ambrosia

Call for Student Papers

Undergraduate and graduate students are encouraged to submit abstracts for 15-minute talks at the Spring Meeting. Topics may be drawn from any area of mathematics or a related discipline. The presentation may be an expository talk, a recounting of a mathematical internship or co-op experience, or the results of a research project.

If there is sufficient interest, one session of talks will be set aside for graduate students. Depending on the topic and level of the intended audience, graduate students may present their talks during the contributed paper sessions on Saturday morning.

Each student speaker will receive a free one-year MAA membership. Student talks are an integral part of the meeting, and should be an enjoyable and rewarding experience for all who participate. Faculty members are asked to encourage their students to give presentations and to provide support and suggestions during the preparation of each talk.

Students preparing talks should refer to Joseph Gallian’s article “How to Give a Good Talk” in the April, 1998, Math Horizons (p. 29). Abstracts should be between 25 and 75 words in length. Each presentation room will include a blackboard and one overhead projector. The student must provide anything else necessary for his/her talk. The rooms do not have internet connections.

Fred Rickey to Present Student Microcourse

Thanks to a generous grant from the Exxon Education Foundation, the Section was able to invite Fred Rickey to present this year’s student microcourse, “A Quick History of the Calculus.” Fred is a professor of mathematics at the U.S. Military Academy, but many of us know him from his time at Bowling Green State University. We are pleased that Fred will be able to join us at the spring meeting, and we encourage students to participate in this interesting microcourse.

Abstract: The Calculus was created by Isaac Newton and Gottfried Leibniz in the seventeenth century. To illustrate what a fabulous accomplishment this was we shall look at some of the ad hoc methods used by their predecessors such as Fermat and Torricelli. Then, to see that the Calculus that Newton and Leibniz created is not the calculus we use today, we shall look at the contributions of Euler, Cauchy and Weierstrass. The aim will be to give a big picture of how the Calculus developed.

Two trophies will be awarded to the institutions sponsoring the most student talks. One trophy will be awarded to a school with an undergraduate enrollment of more than 10,000, and the other will be awarded to a school with an undergraduate enrollment of less than 10,000. The host institution is not eligible to receive a trophy.

Students are encouraged to use the interactive abstract submission form on the meeting page (or www.cedarville.edu/dept/sm/jas/papersub.htm).

Otherwise abstracts may be submitted by U.S. mail to Barbara D’Ambrosia, Department of Mathematics and Computer Science, John Carroll University, University Heights, Ohio 44118, or by e-mail to bdambrosia@jcu.edu. Please include your name, institution, e-mail address, student status (junior, senior, etc.), name of faculty mentor for the talk, your intended audience (upper level undergraduate, lower level undergraduate, etc.), the title of the talk and a brief description of the presentation. Abstracts must be received by March 12, 1999. PLEASE NOTE: This deadline is one week earlier than the meeting registration deadline! Students who submit abstracts should also register for the meeting.
The University of Dayton, founded in 1850, is a private, coeducational school founded and directed by the Society of Mary (Marianists), a Roman Catholic teaching order. It is among the nations largest Catholic institutions of higher learning. The main campus is twenty-six acres overlooking the city of Dayton, Ohio.

On July 1, 1850, the University of Dayton had its beginning as St Marys School for Boys, with fourteen boarding students of high school age. The school was incorporated and empowered to confer collegiate degrees in 1882. Shortly thereafter it became known as St Marys College. It was not until 1920 that the name was changed to the University of Dayton.

At the present the University is organized into five colleges: Arts & Sciences, Engineering, Business, Education, and Law. There are approximately 400 full time faculty and 6200 full time undergraduates (approximately 2/3 of those are in the College of Arts & Sciences). There are 15-20 different Bachelor degree programs, 10-15 different Masters programs, PhD in Biology, PhD in Engineering, Doctor of Engineering, and Juris Doctor. The graduate and part-time students account for another 3000 students.

The Mathematics Department, founded in 1920, offers BA in Math, BS in Math, and MA. The faculty, which consists of 18 full time and 8 part time people, offer courses for 30 majors, as well as service courses for Engineers, Physicists, Chemists, Computer Scientists, Education and others. For a major in mathematics, the students are required to take 9 courses beyond Calculus, of which 4 are specified.

The Computer Science Department, founded in 1965, offers BS in Computer Science, BS in Systems Analysis, and BS in CPS-Physics. The faculty, which consists of 9 full time and 12 part time instructors, offer courses for 350 majors, as well as service courses for many departments. For a major in CPS, after the first 4 introductory courses, the students are required to take 9 courses of which 4 are specified. They are also required to take 4 math courses beyond Calculus, of which 2 are specified.

The University, through the Office of Computing Activities, operates a NCR 3600, and a PRIME. The PRIME is used primarily for administrative work. Most CPS courses use the NCR 3600. There is also a lab of 30 386-machines for the Intro to CPS courses. At present, each member of the Math Department has a PC in his/ her office, connected to the LAN. The Math Department also now shares with other science departments, two computer labs, each having 20 PC's with pentium processors.

University of Dayton

Also see page 11 for more information on places to stay and near the university.

Places to Stay

Please make your reservations directly with the hotel/motel. For some of the rates quoted below, be sure to mention that you will be attending the Mathematics Meeting at the University of Dayton. All are just off I-75 at exit number given. See map.

Near the University of Dayton Arena
1. Dayton Marriott Hotel
   1414 S Patterson Blvd
   Dayton OH 45409, Exit 51
   937-223-1000 (1 mi.)
   $99+ single or double - Mention UD

2. Holiday Inn Holidome
   2455 Dryden Rd
   Moraine OH 45439, Exit 50A
   937-294-1471 (3 mi.)
   $75+ single or double - Mention UD

North of downtown Dayton
3. Holiday Inn
   2301 Wagner Ford Rd
   Dayton OH 45414, Exit 57
   937-278-4871 (8 mi.)
   $72+ single or double - Mention UD

4. Red Roof Inn
   7370 Miller Lane.
   I-75 & Little York Rd
   Dayton OH 45414, Exit 60
   937-898-1054 (10 mi.)
   $39.99+ single or $44.99+ double

5. Fairfield Inn
   6950 Miller Lane
   I-75 & Little York Rd
   Dayton OH 45414, Exit 60
   937-898-1120 (10 mi.)
   $49+ single or double - Mention UD

6. Dayton Lodge (Best Western soon)
   2401 Needmore Rd
   Dayton OH 45414, Exit 58
   937-278-5711 (8 mi.)
   $51+ single or double - Mention UD

7. Cross Country Inn
   2301 Wagner Ford Rd
   Dayton OH 45414, Exit 57
   937-278-4871 (8 mi.)
   $72+ single or double - Mention UD

South of Dayton.
8. Knights Inn
   185 Byers Road
   Miamisburg OH 45342, Exit 44
   937-859-8797 (9 mi.) - Mention UD
   $39.55+ single or $42.25+ double

9. Red Roof Inn
   222 Byers Road
   Miamisburg OH 45342, Exit 44
   937-898-1120 (10 mi.)
   $39.99+ single or double

Banquet Menu

Take I-75 to Exit #51, Edwin C. Moses Boulevard. See maps and further directions on pages 11. To get to this exit:
- From I-70, Westbound (from Columbus): Exit I-70 at Ohio Rt 4. Proceed southbound to I-75 south.
- From I-75, Southbound (from Toledo): Proceed southbound through downtown Dayton.
- From I-70, Eastbound (from Indianapolis and Dayton Airport): Exit I-70 at I-75 south. Proceed southbound through downtown Dayton.
- From I-75, Northbound (from Cincinnati): Exit #51 right, at Edwin C. Moses Boulevard.

Banquet Menu

- Coffee, Tea, or Milk
- From I-75 at exit 51, right, onto Edwin C. Moses Boulevard. See maps and further directions on pages 11. To get to this exit:
- From I-70, Westbound (from Columbus): Exit I-70 at Ohio Rt 4. Proceed southbound to I-75 south.
- From I-75, Southbound (from Toledo): Proceed southbound through downtown Dayton.
- From I-70, Eastbound (from Indianapolis and Dayton Airport): Exit I-70 at I-75 south. Proceed southbound through downtown Dayton.
- From I-75, Northbound (from Cincinnati): Exit #51 right, at Edwin C. Moses Boulevard.

Banquet Menu

- Cash Bar - Wine, Beer & Soft Drinks
- Mixed Greens w/Gorgonzola & Honey Vinaigrette
- Mini Croissants & Sourdough Rolls
- Choice of entree: Honey Herb Chicken or Sauteed Orange Roughy or Vegetable Strudel. (Select on registration form.)
- Wild Rice
- Whole Green Beans w/ Red Pepper Ring
- Coffee, Tea, or Milk

For dessert, we will join the student participants for an Ice Cream Social after the business meeting.
SPRING MEETING REGISTRATION FORM

There is separate student registration on page 7.

Name: ____________________________________________ E-mail: ____________________________

Institutional Affiliation: ____________________________________________ Phone: ______________________

Address: ____________________________________________________________

City: ____________________________ State: ________ Zip: ________

Amount enclosed: __________ Registration Fee ($15.00 for full time, $5.00 for others, waived for students)

_______ Banquet – indicate entree: ____ Honey Herb Chicken ($10)

_______ Sauteed Orange Roughy ($12) ____ Vegetable Strudel ($9)

_______ Total

Please check one of the following:  ___University faculty  ___Four-year college faculty  ___Two-year college faculty

___Graduate Student  ___High school teacher  ___Industry/Government  ________________Other

Mail the completed form, along with your check (Payable to “MAA OHIO SECTION”), to:  J William Friel, Department of Mathematics, University of Dayton, Dayton, OH 45469-2316

Make reservations by March 19 to ensure a banquet ticket.  Early registration will help those making arrangements.
Ohio Section

Winter Technology Institute, Columbus State CC, 1999, March 5-6.
October 22-23, 1999, College of Wooster
April 7-8, 2000, Marshall U., Huntington WV.
Fall, 2000, Wittenberg U., Springfield

National MAA

July 31-Aug 2, 1999, Mathfest, Providence RI.
January 19-22, 2000, Annual Joint Meetings, Washington, DC, also with SIAM.
August 3-5, 2000, Mathfest, UCLA
January 10-13, 2001, Annual Joint Meetings, New Orleans
January 6-9, 2002, Annual Joint Meetings, San Diego

Other

Conference on Undergraduate Mathematics, March 19-20, 1999, Rose-Hulman Institute of Technology, Terre Haute, IN
Kentucky Section, March 26-27, 1999. University of Louisville
Indiana Section, March 26-27, 1999, Indiana U., Bloomington
Allegheny Mtn. Section, April 9-10, 1999, Allegheny C., Meadville, PA
NCTM, April 22-25, 1999, San Francisco.
Ohio Academy of Science, April 23-25, 1999, Cleveland State.
SIAM Annual Meeting, May 12-15, 1999, Atlanta
Mathematics Across the Curriculum, July 9-10, 1999, Indiana U.
OCTM, September 23-25, 1999, Dayton

Complimentary copies of this newsletter are being distributed to people who might be interested in Ohio Section activities. By joining the MAA, you will get your own copy of the newsletter. If you are not an MAA member, look at the web page: http://www.maa.org/mbsvcs/individual.html. MAA Departmental Liaisons also have information. Low rates apply for new members.