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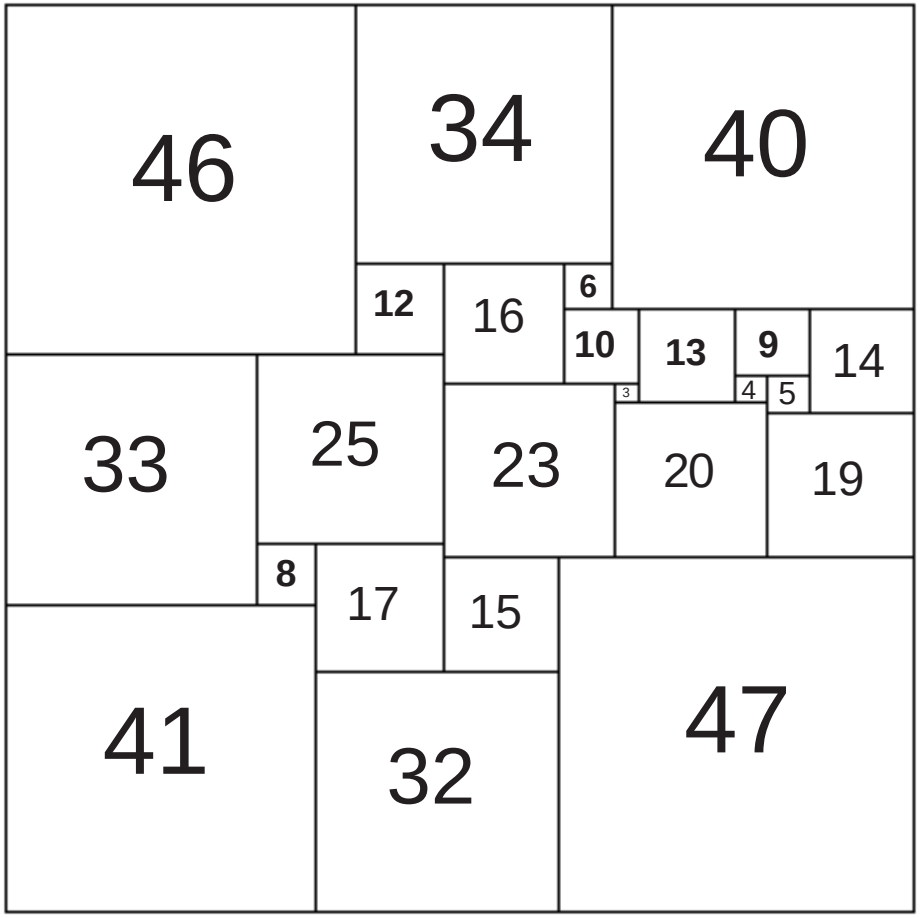
Michigan Section – MAA

NEWSLETTER

Volume 23, Number 1 **December 1996**



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Mathematical Association of America
Michigan Section Newsletter
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Abbreviations

CC = Community College
CMU = Central Michigan U
EMU = Eastern Michigan U
FSU = Ferris State U
GVSU = Grand Valley State U
LSSU = Lake Superior State U
LTU = Lawrence Technological U
MSU = Michigan State U
MTU = Michigan Technological U
NMU = Northern Michigan U
SVSU = Saginaw Valley State U
U = University
UD = U of Detroit Mercy
UM = U of Michigan
WMU = Western Michigan U
WSU = Wayne State U

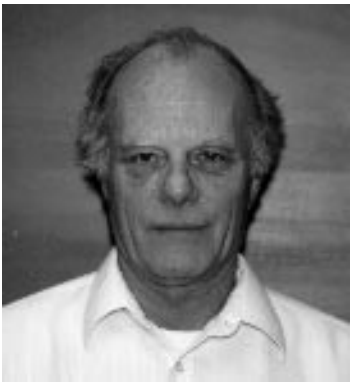
Calendar of Events

January 4, 1997	MMPC Grading Day, GVSU, Allendale, MI
January 8–11, 1997	Joint Math Meetings (80th), San Diego, CA
April 17–20, 1997	NCTM 75th Annual Meeting, Minneapolis, MN
March 1, 1997	MMPC Awards Day, GVSU, Allendale, MI
May 2–4, 1997	Michigan Section Meeting and AMS regional meeting, Wayne State University, Detroit
August 2–4, 1997	MAA MathFest '97, Atlanta, GA
October 15–18, 1997	MCTM Annual Meeting, Dearborn, MI
January 7–10, 1998	Joint Math Meetings (81st), Baltimore, MD
April 2–5, 1998	NCTM 76th Annual Meeting, Washington, DC
May 1–2, 1998	Michigan Section Meeting, WMU, Kalamazoo
October 29–31, 1998	MCTM Annual Meeting, Traverse City, MI
January 13–16, 1999	Joint Math Meetings (82nd), San Antonio, TX
April 22–25, 1999	NCTM 77th Annual Meeting, San Francisco, CA
January 19–22, 2000	Joint Math Meetings (83rd), Washington, DC
January 10–13, 2001	Joint Math Meetings (84th), New Orleans, LA

On the Cover—Squaring the Square

This is one of the smallest known examples of a square constructed from two or more smaller squares all of different sizes. The problem of finding such "squared squares" dates back at least 60 years; the first example was found in 1939 using graph theoretic techniques. Bill Tutte has an article about it in Martin Gardner's *The 2nd Scientific American Book of Mathematical Puzzles & Diversions* (Simon and Schuster, 1961), and more recent accounts can be found in *Tilings and Patterns* by Grünbaum and Shephard (Freeman, 1987) and *Unsolved Problems in Geometry* by Croft, Falconer, and Guy (Springer, 1991). Our thanks to **Allen Schwenk** (WMU) for suggesting this cover design.

Chairperson's Report



During my stint last year as one of the Vice Chairs of the Section, I was somewhat astonished (pleasantly) by the large number of people willing to dedicate endless time and energy to Section activities. The active committees alone involve over forty members, while the planning and hosting of last year's spring meeting required daily attention from eight to ten people over a three-month period. I add that those putting forth this effort seem to enjoy what they are doing, a feature that makes the duties of the Chair pleasant and relatively easy.

While help has come from many, several individuals have lent overwhelming support to the Section. Foremost among these are **John Petro** (WMU) and **Tom Miles** (CMU). John is currently the Governor of the Section, and for two years served as editor of the Section *Newsletter*. Tom served as Vice Chair and Chair, and now holds the title of Past Chair; he is still very much involved in the planning and execution of Section activities.

New Vice Chairs for this year are **Matt Wyneken** (UM-Flint) and **Jim Chesla** (Grand Rapids CC). **Bette Warren** (EMU) remains as Secretary/Treasurer, while **Earl Fife** (Calvin College) will continue as Public Information and Electronic Services Officer. All of the work on our Web site is due to Earl. Do visit the Section home page (`http://archives.math.utk.edu/~efife/MAA/`), from which you can access information regarding Section events and activities, committees and officers, and links to departments throughout the state.

Jerry Grossman (Oakland U) has taken on the demanding job of *Newsletter* editor this fall; the Prize Competition will be directed this year by **Karen Novotny** (GVSU); and **Garry Johns** (SVSU) will continue as director of the High School Visiting Lecture Program.

Many thanks from all of us to the people noted above, and to others whose efforts have made the Section a viable and exciting professional organization.

Richard Phillips, Chair

Section Meeting at Wayne State, May 2–3, 1997

Planning for the next Annual Meeting is under way. This year's meeting of the Michigan Section of the MAA and MichMATYC will be held jointly with the Central Section Meeting of the American Mathematical Society (AMS) at Wayne State University in Detroit during the first weekend of May.

The Program Committee has recruited a number of invited speakers and drafted a list of special session topics. Invited speakers include **Arnold Ostebee** (St. Olaf College), **Pat Shure** (UM-Ann Arbor), **Fred Gehring** (UM-Ann Arbor), **Charles Vonder Embse** (CMU), **Karen Smith** (UM-Ann Arbor), **Jeanne Wald** (MSU), **Allen Schwenk** (WMU), **John Martino** (WMU), **Scott Dillery** (Albion), **Julianne Rainbolt** (MSU), **Janet Anderson** (Hope), and **Chris Schaufele** and **Nancy Zumoff** (both from Kennesaw State College).

Larry King (UM-Flint) is coordinating a panel presentation on the FIPSE Project, a joint effort of the mathematics, science, and education departments at UM-Flint and Mott CC to improve the mathematics and science preparation of pre-service elementary school teachers. **John Dersch** and **S. Paul Hess** (Grand Rapids CC) will present their experiences using the TI-92 graphics calculator in first-year calculus. There will be a panel discussion on alternative learning systems, moderated by **Barbara Jur** (Macomb CC). In addition, **Virginia Kasten** (GM Truck & Bus) will again coordinate the Math in Industry session, and AT&T and Waterloo Maple will again provide speakers.

Additional special sessions will be devoted to themes such as classroom pedagogy, precalculus and calculus reform, teaching of algebra, careers in the mathematical sciences, Michigan Statewide Systemic Initiative (MSSI), Mathematics and the Internet (Math Awareness Week topic for 1997), transition topics (from high school to college), and distance learning and the virtual college.

Sessions for faculty and student contributed papers are also being planned. A call for papers appears on page 33. Contributed papers are particularly sought in the areas in which special sessions are being planned.

The program committee consists of **Matt Wyneken** (UM-Flint) and **Jim Chesla** (Grand Rapids CC). Please notify one of us if you would like to give a presentation or if you have a suggestion for the program. Contact information is given on page 34.

Matt Wyneken, Program Committee Chair

Secretary and Treasurer's Report

The annual request for dues has just been sent to each member of the MAA residing in the state of Michigan. Your support is essential to the Michigan Section and we appreciate your prompt response. At this point the Michigan Section's bank balance is $3707.93, which is roughly $1000 less than the balance at the same time last year, just before the dues started coming in.

The dues form was redesigned this year to ask for important demographic information, such as student status, type of employment and e-mail addresses. We hope that you will take the time to respond so that we can get a better idea of whom we serve (and whom we should be trying to reach). As an additional service to MAA members this year, we included in the annual dues mailing a Call for Papers for the annual meeting (to be held May 2–3, 1997 at WSU). We hope that this early announcement will give people more time to develop ideas for presentations and will encourage participation in the meeting.

The major factor driving the reduction in the Section's balance is the cost of printing and mailing the *Newsletter*. As a service to the collegiate mathematical community, the newsletter is mailed to all faculty members in mathematical sciences departments of Michigan's colleges and universities, as well as to all MAA members in the state. We are asking that the state's collegiate mathematics departments support this service by becoming institutional members of the Michigan Section ($30 for small institutions and $50 for large institutions). Response last year was very good; the Section had 31 institutional members. We appreciate the support and hope that we can count on it again this year. Each request for institutional dues was accompanied by a summary sheet showing the information about the department currently contained in the Section's data base. We are asking department chairs to make necessary corrections and supply missing information.

Finally, if you have not sent your last year's (1995–96) dues, it is

not too late. Simply send a check payable to Michigan Section–MAA for $10 (Regular Member) or $25 (Sustaining Member) to **Bette L. Warren**, Treasurer, Michigan Section, Math Department, Eastern Michigan University, Ypsilanti, MI 48197. A form for joining the Section can be found on page 30.

Bette L. Warren, Secretary/Treasurer

Women's Study Committee Report

For several years the Women's Study Committee has sent letters of congratulations and literature on careers using mathematics to all of the young women who qualified to take Part II of the Michigan Mathematics Prize Competition. The intent is to encourage these talented young women to continue taking mathematics courses in high school and college. Last year we sent about 230 letters to the 1995–96 qualifiers. Thanks to the help of the 1995–96 MMPC director Steve Schlicker, we were able to use a data file of qualifiers to personalize each letter.

Bette L. Warren, Committee Chair

Elliot Tanis Honored

Professor **Elliot A. Tanis** (Hope College) was awarded the Michigan Section's Distinguished Service Award at the 1996 Annual Meeting of the Michigan Section last May.

Professor Tanis has served the Michigan Section as Vice Chair, Chair, Past Chair, and Governor. In addition, he has helped develop a summer short course at Hope College. His own excellent teaching, research, and breadth of interests have been shared with the Section through his numerous presentations and in his various leadership activities. The citation presented to him at the meeting is shown on page 8.

Governor's Report

Seattle MathFest '96, held last August at the University of Washington, brought to an end a long-standing tradition of American Mathematical Society participation in summer meetings. After considerable discussion, the Board of Governors decided that MathFest '97 will be held in Atlanta, Georgia, on August 2–4, 1997. This represents a significant change for the MAA, since they will be doing this without the support and assistance of the AMS. In fact, the MAA has made a commitment to continue MathFest on a regular basis through the year 2000. After the 1998 meeting, a comprehensive review will be made to determine whether or not to continue summer meetings beyond 2000. As an experiment, the MAA will follow the model of winter meetings for MathFest '97 by using primarily hotel facilities rather than academic facilities. The winter meetings will continue as joint meetings with the AMS. Please plan to attend both summer and winter meetings regularly, and encourage your students to attend and present papers at MAA and Pi Mu Epsilon student paper sessions.

Project NExT is a professional development program for new and recent PhD's in the mathematical sciences that addresses issues in undergraduate mathematics education. It is now in its third year. The presence of these exciting young faculty members at MathFest '96 enlivened the entire meeting. Our two Project NExT fellows from Michigan this year are **Heather Gavlas** (GVSU), and **Julianne Rainbolt** (MSU).

The MAA/Department Liaison program is going well. Approximately two thirds of the roughly 65 institutions of higher education in Michigan have appointed a liaison. If your institution has not appointed a liaison yet, I encourage you to do so. If you need assistance with this, please contact me.

John W. Petro, Governor, **Michigan Section–MAA**

Change at the Helm of the *Newsletter*

John Kiltinen and **Bill Babcock** (NMU) set the standard for MAA section newsletters with their fine efforts over ten years, and our *Newsletter* evolved into its present form. For the past two years **John Petro**, with help from **Allen Schwenk** (WMU), has carried on the tradition. Now the torch is being passed again, as John winds down his involvement (while simultaneously assuming increased duties as Section Governor and chair of his department) and I have taken over the primary responsibility for editing the *Newsletter*. John will continue to help out as co-editor this year, however.

I want this to be <u>your</u> *Newsletter*. This means, among other things, that I really want to hear your suggestions for what should be included, especially new ideas for articles and features. Of course much of the content is constant from year to year—news of all kinds from campuses throughout the state, reports from the section officers and committee chairs, reports on the previous year's annual meeting and preparation for the current year's festivities, citations of outstanding contributions of our members, calendar of events, and so on. We do not shrink from controversy and will continue to publish opinion pieces, such as the thought-provoking essay by Art White in this issue. What else would you like to see?

Please let me know your opinions about the *Newsletter*. My contact information is shown on the inside front cover. On a broader level, it is clear that the Section will function best if we all contribute. Browse through this issue and see what activities you wish to participate in; then get involved! Meanwhile, have an enjoyable holiday, and I hope to see you all at the MMPC grading session at Grand Valley State University on January 4.

Jerry Grossman, *Newsletter* Editor

CITATION
for
ELLIOT A. TANIS
for the
MICHIGAN SECTION
MATHEMATICAL ASSOCIATION OF AMERICA
DISTINGUISHED SERVICE AWARD

The Michigan Section of the Mathematical Association of America is extremely pleased to recognize **Professor Elliot A. Tanis** as the 1996 recipient of the Distinguished Service Award. We gratefully acknowledge with many thanks the substantial contributions he has made to the Michigan Section, to the Mathematical Association of America, and to the greater mathematical community.

Professor Tanis began his long list of service to the Michigan Section in 1975 as Vice Chair of the Section and Chair of the Program Committee for the 1976 spring meeting. He spent five years as a member of the Executive Committee of the Section, including a year as Chair. In 1989–92 Elliot served as Governor of the Section, and it was in that time period that the project for establishing the Michigan Section Room at the MAA offices in Washington D.C. was begun. Elliot was the first recipient of the Section Award for Distinguished College or University Teaching in 1992, having also won a similar award at Hope College. He has been a frequent speaker at Section events as well as at National MAA meetings. He has served the Section as a member of the Constitutional Revision Committee, the Nominating Committee, the Committee to Select the Distinguished Teacher, the Distinguished Service Award Committee, Local Arrangements Committee, and as a grader for the Michigan Mathematics Prize Competition. He is known for his contributions to the teaching of statistics through papers, lectures, and MAA minicourses, and for his excellent presentations concerning computer drawn Escher patterns. Elliot Tanis has served his college, his community, his discipline, and his professional organizations in an exemplary manner.

For his many years of dedicated service and outstanding leadership, the Michigan Section is proud to present the

1996 DISTINGUISHED SERVICE AWARD

to

PROFESSOR ELLIOT A. TANIS

From the Origin: A Section for Opinion

My coordinates in the universe? ... The origin, of course!

From the Origin provides a forum for lively discussion of issues of importance to the mathematical community. The Michigan Section–MAA Newsletter solicits opinion pieces for publication in this column from anyone in the Michigan mathematical community. In addition, comments on pieces published in earlier issues are welcomed.

Items for *From the Origin* should be submitted to the editor by the beginning of October to be considered for inclusion in the December issue and by the beginning of February for the April issue. Main opinion pieces should be at most 1800 words long, and responses at most 400. The editors reserve the right to shorten responses, if necessary, in order to fit as many as possible within the available space.

MATHEMATICS IN THE POSTMODERN ERA

An Essay by Arthur T. White (WMU)
(recipient of the 1996 Michigan Section Distinguished Teaching Award)

I was attracted to mathematics over forty years ago, and have remained devoted to the discipline since, because of its qualities of truth, beauty, objectivity, and aloofness from matters mundane. Bertrand Russell said it better (*The Study of Mathematics: Philosophical Essays* (London, 1910), p. 73): "Mathematics, rightly viewed, possesses not only truth, but supreme beauty—a beauty cold and austere, like that of sculpture, without appeal to any part of our weaker nature, without the gorgeous trappings of painting or music, yet sublimely pure, and capable of a stern perfection such as only the greatest art can show. ... Remote from human passions, remote even from the pitiful facts of nature, the generations have gradually created an ordered cosmos, where pure thought can dwell as in its natural home, and where one, at least, of our nobler impulses can escape from the dreary exile of the natural world."

Postmodernism takes a startling different view, across all disciplines. As Gertrude Himmelfarb alerts us ("Academic Advocates", *Commentary* (September, 1995), p. 47): "The animating spirit of postmodernism is a radical skepticism and relativism that rejects any idea of truth, knowledge, reason, or objectivity. More important, it refuses even to aspire to such ideas, on the ground that they are not only unattainable but undesirable—that they are, by their very nature, authoritarian and oppressive."

Postmodernism (with origins in the writings of Derrida and Foucault, for example) took hold, in this country, in our departments of English. Traditional literary criticism, in which the text is paramount and the reader is secondary, has been "deconstructed" and replaced by a sequence of approaches currently featuring "reader response" theory, where the reader is paramount and the text is secondary. This has the effect of increasing the self-esteem of the reader, while diminishing the legacy of the great thinkers and crafters of language of the past. The deconstruction of history has led to the National History Standards (vehemently rejected, in their first incarnation, by the United States Senate), to the Enola Gay exhibit at the Smithsonian Institution (similarly rejected), and to Afro-centrist history (currently being debated). In each case established fact is subordinated to the need for self-esteem, or for addressing grievances of various groups claiming victim status, or for replacing Western culture and tradition with multiculturalism. The deconstruction of science has produced a distrust in the scientific method and technology, and has heightened interest in alternative medicine, creationism, astrology, and the paranormal. The further deconstruction of patterns of Western thought has led to "emotion-based reasoning", which produces such phenomena as the advocacy of jury nullification in contexts of social engineering. With Russell, I had thought mathematics and mathematicians to be secure from all such social and political inroads. But are we?

A mathematician, I believe, is quite likely to be motivated by the Platonic view that mathematics is external to the human mind, that mathematical truth is discovered, and—within a given system of axiomatic assumptions—that it has a desirable quality of being absolute. This traditional view is being deconstructed by some mathematics educators (see, for example, Paul Ernest, *The Philosophy of Mathematics Education*, The Famler Press, London, 1991) and is being replaced by the postmodernist "social constructivism". According to the social constructivists, knowledge is subjective, not objective; rather than being found by careful investigation of an actually existing external world, it is constructed (i.e., created) by each individual, according to his unique needs and social setting; absolutism is deliberately replaced by cultural relativism.

The philosophical stance one takes on these issues would seem to

have substantial impact upon one's pedagogy. The new pedagogy in mathematics, as represented by the *Curriculum and Evaluation Standards for School Mathematics* and the *Professional Standards for Teaching Mathematics* of the National Council of Teachers of Mathematics (NCTM) and by the calculus reform movement, has much that even a mathematical Platonist can find of value. For example, I have enjoyed using small-group guided discovery in my classes where appropriate, and for many years I have been stressing mathematical reasoning (as opposed to rote calculation), problem solving, connections, and writing experiences in the mathematical classroom. I also use a modified Moore method of instruction and a tutorial system in my Mathematical Proofs course, so I am not locked into traditional lecture-style pedagogy exclusively.

But the aspects of the *Standards* and calculus reform that trouble me are those that just might be more motivated by postmodernist egalitarian (neo-Marxist?) political, rather than pedagogical, considerations. And so I raise the following concerns.

(1) Mathematics education, through both the NCTM *Standards* and calculus reform, has the goal of making mathematics accessible to all students. But I wonder whether, after we pare away whatever of mathematics is not accessible to everyone, what remains will still be mathematics. If, in fact, we hope in vain that the masses can master mathematics, then perhaps calculus (or algebra) does have a legitimate role as a filter for some students, as well as being a pump for others.

(2) Reform trends indicate that group work (cooperative and/or collaborative learning) should be almost universally appropriate in the classroom. Students teaching each other material they don't know, and perhaps have no natural affinity for, might be effective in a relativistic sense, but if we don't want to discard millennia of the best that careful thought can produce, then I doubt that the pedagogy is universally effective in an absolute sense. To whatever extent we assess by groups, then I fear we are following the failed Marxist maxim: "From each according to his ability, to each according to his need."

(3) One calculus reform text openly states its goal of replacing elegance with brute force. This, perhaps, would make the material both less mathematically pleasing to some students, and more accessible to others, thus more nearly approximating an egalitarian equality of outcome. But this nation has long stood for equality of opportunity, not necessarily of outcome.

(4) The increased emphasis on technology and on practical applications, as with many other aspects of the reformed pedagogy, should be of benefit to

future *users* of mathematics. But we should also concern ourselves with the future *producers* of mathematics. When much of the proposed pedagogy is driven by educators who are not themselves mathematicians, or who perhaps are seeking to politicize mathematics, then the adequacy of the training for the next generation of *mathematicians* becomes suspect. I believe that realistic, but conceptually and numerically cumbersome, applications are better left to their specialty disciplines, as they hinder and even obscure the mathematical tools being developed in mathematics courses.

(5) The increasing emphasis on inductive reasoning, with the concomitant de-emphasis on deductive reasoning, might not be the best way to prepare careful thinkers. Instead, I detect here the specter of the postmodernist rejection of rational thought. The "definition–theorem–proof" format that has survived scrutiny since Euclid and stands as a model of mankind's intellectual potential and achievement is now under such attack that, without resistance from its supporters, it might soon vanish entirely from the high school and calculus curricula. "Writing to learn" and classroom discourse can be effective pedagogically. But if carried to excess, they threaten to detract from precision of thought. To what extent do the "rule of three" (numerical, graphical, and symbolic approaches) and redefining mathematics as a laboratory science make pedagogical sense? To what extent do they inject sociopolitics into our discipline?

(6) Reformers would have us avoid problems having just one correct solution. Surely this is postmodernist relativism asserting itself again.

(7) Granted, nationwide the results of calculus instruction are distressing. Some think this should *force* a reform of the pedagogy. Others might prefer to reform the attitudes and abilities of the students who take calculus. Perhaps the lecture system really is the worst system of instruction there is—except for all the others.

(8) To the multiculturalists, to the postmodern cultural relativists, to the selectors of the amazingly politically correct photographs for the NCTM's *Professional Standards for Teaching Mathematics*, we should simply say: "We welcome all who wish to join us in our glorious adventure; we will support and encourage you. But there is just one culture here: it is mathematics."

My coordinates in the universe? ... The origin, of course!

VISIT THE MICHIGAN SECTION'S WEB SITE

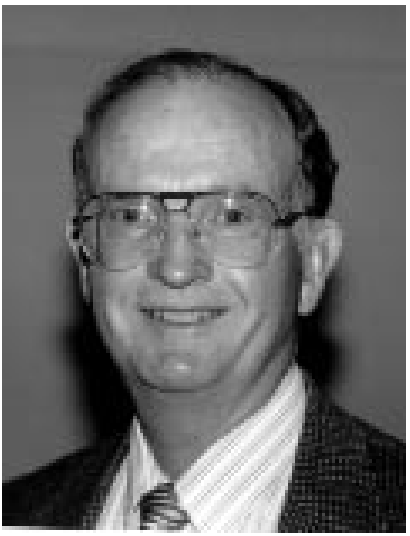
http://archives.math.utk.edu/~efife/MAA/

High School Visiting Lecture Program

The Michigan Section's High School Visiting Lecture Program (HSVLP) is an excellent method for connecting high school teachers and students with university faculty and other mathematics professionals. Already this fall, over fifteen requests from teachers around Michigan have been submitted. Popular topics include careers, applications, and recreational mathematics. **Garry Johns** (SVSU) is serving as the director of the program for his third year.

All faculty interested in encouraging the study of mathematics are invited to participate in this program. Since requests come from all over the state, speakers from many colleges are needed. Currently, twenty individuals from thirteen institutions offer almost fifty talks. If you have a presentation appropriate for high school students or questions about the program, please contact Garry at the Department of Mathematics, Saginaw Valley State University, University Center, MI 48710; glj@tardis.svsu.edu; 517-790-5688.

Art White Honored



Professor **Arthur T. White** (WMU) was presented with the Michigan Section's Award for Distinguished College or University Teaching of Mathematics at the 1996 Annual Meeting of the Michigan Section last May. White was cited for his many years of outstanding work both in the classroom and beyond. As the section's awardee, Art became a finalist for the national MAA Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics. The citation given to him at the meeting is reproduced on page 14.

Award for Distinguished College or University Teaching of Mathematics

presented to

Arthur T. White

The Michigan Section of the Mathematical Association of America is pleased to announce that Professor Arthur T. White of Western Michigan University has been selected as the 1995–1996 recipient of the Award for Distinguished College or University Teaching of Mathematics.

Dr. White has been teaching at Western Michigan University since 1969, except for sabbatical leaves spent at the University of London and Oxford University. He has taught a wide range of courses in the Department of Mathematics and Statistics, from beginning calculus to graduate seminars using his textbook on Graphs, Groups, and Surfaces; from the history of mathematics to an undergraduate course entitled "A Survey of Mathematical Ideas" for the Honors College. He even teaches a Great Books course for the English department.

In addition, Professor White serves as a visiting lecturer for the MAA, traveling around the country speaking on such topics as relationships between mathematics and poetry. He has presented papers on mathematics teaching at national conferences; serves as a mentor for students both at the university and throughout the community; and works with other teachers at Western, as well as at Kalamazoo College and local high schools, to help them perfect their teaching.

During his tenure at WMU, Art White has won every possible university award for special achievement in teaching and scholarship.

Colleagues' letters call Dr. White's teaching superb. They report that students fill his courses and cluster around him before and after class. Professor White takes special interest in his students, sometimes inviting them to his home and encouraging them with gifts of mathematics books. He sets very high standards and then inspires his students to meet those standards, using teaching methods that foster creativity, individual initiative, self-confidence, and good written and oral communication skills.

One of Professor White's students said that he makes the incomprehensible comprehensible, if not elementary. Said another, "Day after day he helps students grasp concepts, asking for their insights as well as sharing his own, and, in the end, making his beloved subject as beautiful to his students as it is to him." A graduate student and teaching assistant summed it up by calling Dr. White simply "the best instructor I have ever had".

The Michigan Section of the Mathematical Association of America is proud to be represented by dedicated teachers such as Dr. Arthur T. White.

Short Course Announcement

The North Central Section of the MAA announces its Summer 1997 Short Course, *An Introduction to Artificial Neural Networks*, to be held June 16–18, 1997 at Winona State University in Minnesota.

Artificial neural networks are being used with increasing frequency for prediction and classification in high dimensional problems. Originally inspired by attempts at modeling the human brain, artificial neural networks have received enormous publicity for a set of statistical models. The goal of this course is to provide an introduction to the field. No prior exposure to artificial neural networks will be assumed. Time will be reserved for hands-on computer laboratory work using S-Plus and/or Matlab. The instructors are widely published and have given many talks on the subject of artificial neural networks.

Nestled between the Mississippi River and scenic bluffs, Winona offers a variety of recreational and tourist activities for participants and their families. The course fee will be $195 for those who register before March 15, 1997. Dormitory housing will be available at very reasonable cost.

For more information about the short course, or for travel and housing information, see the workshop home page (`http://mathweb.winona.msus.edu/nnets97/`), or contact one of the co-organizers, **Darrin Frey**, **Steve Leonhardi**, or **Barry Peratt**, via e-mail (`nnets97@wind.winona.msus.edu`), snail-mail (Summer 1997 Neural Networks Short Course, Winona State University, Department of Mathematics and Statistics, Winona, MN 55987), or telephone (507-457-5370).

Student Nominations Sought

The Section's Student Activities Committee is soliciting nominees for student members. **Garry Johns** (SVSU) is currently the Coordinator of Student Chapters. Anyone with suggestions should contact Garry or another member of the Executive Committee (see addresses on pages 34–35).

Student Chapter News

Grand Valley State University

The new MAA Student Chapter was selected by the GVSU student government as the Best New Student Organization on campus for 1995–96. • Recent activities include social events and a presentation by Peter Hilton and Jean Pedersen. • Officers are **Renee Rinzema** (president), **Monica Simon** (VP), **Wendy Ferguson** (treasurer), and **Sheila Pomeroy** (secretary). **Paul Fishback** is the faculty advisor.

Hope College

Three students are studying mathematics abroad in the Budapest Semester program: **Nobuyuki Shimitzu**, **Lydia Hadden**, and **Joshua Levy**. • The last two of these, as well as **Michael VanOpstall**, **James Vanderhyde**, and **Ryan James**, conducted mathematics research at various REU sites last summer; Lydia and Michael will be reporting on their work at the AMS–MAA meetings in San Diego in January. Other students from across the country participated in Hope's own REU, as well. • The Hope Putnam team (**John Krueger**, **Joshua Levy**, and **Andy Lorenz**) placed 21st nationally last year, and **John Krueger** ranked16th individually. This same team won the LMMC for the third straight year (see Campus News from Albion).

Oakland University

Although not yet an MAA Student Chapter, the new mathematics club, SAM (Students for the Advancement of Mathematics) got off to an ambitious start last spring. Activities have included talks by university faculty and outside speakers and the showing of a film to honor the late Paul Erdös. • The president is **Danielle Driscoll**, and **Jerry Grossman** serves as faculty advisor.

Olivet College

The mathematics and computer science student organization, known as Mu Chi Sigma, is run by **Mike Robison** (president), **Kandy Eldred** (VP), **Michelle Sadley** (treasurer), and **Ryan Redewa** (secretary). • At a recent meeting a consultant from a Grand Rapids firm spoke on "Life After Graduation".

Siena Heights College

Maryanne Herman is the president of the MAA student chapter (Mathematical Association of Siena Scholars). • Members of the club plan to attend several conferences including the student math conference at Rose–Hulman in the spring.

University of Michigan–Flint

This year's chapter officers are **Rochelle Hazen** (president), **Tim Coles** (VP), **Amy Fulton** (treasurer), and **Cara Francis** (secretary). **Matt Wyneken** is the advisor.

Western Michigan University

Principal speakers for the combined meetings of Pi Mu Epsilon and the Kalamazoo Area MAA Student Chapter this past fall semester have been **Edward F. Aboufadel** (GVSU), **Chandler Davis** (University of Toronto), and **Donald Girod** (Canisius College). • **David Murphy** presented a Pi Mu Epsilon student paper at the Seattle MathFest.

Annual Meeting at Siena Hei

Domenican Hall
Siena Heights College

Dick Phillips, Vice Chair for 1995–96

Patti Lamm on Inverse Problems

Sid Graham on an Inside Look at NSF

"Line Integral Dancing" after the Annual Banquet

Paul Zorn on Bieberbach's Conjecture

Chris Hirsch on Core-Plus

Chuck Vonder Embse on the Impact of Technology

ights College, May 10–11, 1996

Jerry Grossman presents Teaching Award to Art White

WSU student speakers Premchand Anne, Michael Hogan, Shylynn Lofton, and Samara McCraney

Barbara Jur on Quantitative Literacy

John Berry on Using Technology

Toni Carroll on WAM

Tom Miles, Chair for 1995–96

Howard Young on Math of Finance

Tim Husband on Siena Heights

News from the Campuses

Adrian College [reported by Gene VandenBoss]

Nancy Colwell has joined the department. **James Watson** and **Ray Hembrey** have retired, after 28 and 12 years of service, respectively.

Albion College [reported by Robert Messer]

David Reimann is a new computer scientist in the Math Department at Albion. He is finishing his PhD at WSU and has served as a radiologic computer systems specialist at Henry Ford Hospital in Detroit. • Albion hosted the 20th annual Lower Michigan Mathematics Competition last spring; teams from Hope College, Calvin College, and Albion College topped the field. A host for 1997 has not yet been identified; anyone interested should contact **Robert Messer** (ram@albion.edu).

Alma College [reported by Mel Nyman]

John Putz has returned from sabbatical in Britain. • **Laurel Carpenter** was hired for a one-year visiting position. Her Clemson PhD is in algebraic designs and codes. • **Robert Molina** organized a successful midwestern graph theory conference (MIGHTY XXVI), held at Alma College on October 26.

Central Michigan University [reported by Robert Chaffer]

James Bidwell will retire at the end of 1996–97. **Yury Ionin** and **Charles Vonder Embse** are on sabbatical leave during the Fall. • In early September the department hosted an International Conference on Research in Collegiate Mathematics Education.

Delta College [reported by B. David Redman, Jr.]

The department has a web page (http://www.delta.edu/~math/).

Eastern Michigan University [reported by Tim Carroll]

Gian-Mario Besana was appointed Assistant Professor. He received his PhD from Notre Dame in geometry. • **Larry Badii** retired this past spring after 31 years at Eastern. • **Walter Parry** is on leave in the fall, doing research at Virginia Tech, and **Carla Tayeh** will be on sabbatical in the winter. **K. G. Janardan** has an EMU research fellowship for the year. • Department members took three of the four EMU excellence awards this past year: **Don Buckeye** for distinguished teaching (senior), **Bette Warren** for distinguished service, and **K. G. Janardan** for distinguished scholarship. • EMU will be hosting a Math-Ed conference for K–12 teachers in March; contact **Joanne Caniglia** or **Gerry Green** for information.

Grand Valley State University [reported by Don VanderJagt]

Heather Gavlas joined the department in a tenure-track position this year; she received her PhD in graph theory from WMU. • **Philip Tuchinsky** from Ford Motor Company gave a talk to the department entitled "Little Boxes: Adventures in Automeshing Solids". • The annual MCTM Region 4 Math-in-Action Conference will be held on February 26 on the GVSU campus, from 4:30 to 9:15 p.m.

Hope College [reported by John R. Stoughton]
David Hahn came on board as a one-year visiting assistant professor, and **Ronald VanIwaarden** has been granted another one-year appointment at the same rank. • **Janet Andersen** and **Todd Swanson** from the department, with a local high school teacher, won the third-place prize sponsored by INPUT for their NSF-supported Progressive Precalculus Projects.

Kalamazoo College [reported by John Fink]
Stanley Rajnak has retired after three decades of service. He plans to continue to learn new mathematics and devote more time to gardening, traveling, and pottery-making. • **Eric Nordmoe**, a specialist in categorical data analysis and applications to market research, has joined the faculty; his PhD in statistics is from Northwestern, and he had held a position at the National University in Singapore.

Lake Superior State University [reported by Paul Wilson]
Tom Mickewich is on sabbatical leave this year, planning research, writing, and travel. • **Galen Harrison** is retiring in January after 33 years of service to the university. • **Anthony Fabbri**, an expert in the analysis and design of databases from the University of Louisville, has joined the faculty as an associate professor of computer science

Lansing Community College [reported by JingLing Wang]
Bob Pawlowski was appointed acting chairperson. **JingLing Wang** from MSU was hired to work primarily with the transfer math program. • The Math & Computer Science Department has its own web home page (`http://alpha.lansing.cc.mi.us/~jwang/`) and welcomes suggestions for improvement. Also on the technology front, the college's new STARNET will be fully operational by mid-1997, bringing together voice mail, e-mail, WWW, and personal computers in one integrated communications system. • The department's STAT 215 course has incorporated the teaching of the Windows version of SPSS, letting students do data analysis projects.

Lawrence Technological University [reported by M. Merscher]
Uri Treisman, mathematics educator, MacArthur Fellow, and developer of highly successful programs to improve minority achievement in mathematics, spoke at LTU on October 16. Workshops in calculus based on Treisman's methods will begin this winter.

Michigan State University [reported by Mary Reynolds]
Mike Frazier, **Ulrich Meierfrankenfeld**, and **Vera Zeidan** were promoted to professor. After 30 years as a member of the department, **David Yen** became an emeritis professor last summer. • Two new assistant professors have joined the department: **Alexander Voronov** (algebra), and **Jacek Graczyk** (dynamical systems). This year's new postdoctoral instructors are **Julie Rainbolt** (group theory), **Vyacheslav Krushkal** (topology), and **Wladek Lorek** (geometry). Short

term visitors for the year include **Wayne Smith** (Hawaii) in analysis, **Marianna Dalle Molle** (Italy) and **Paul Hewitt** (Toledo) in group theory, **David Groisser** (Florida) and **Dong Soo Kim** (Korea) in geometry, **Hidefuni Kawasake** (Japan) in optimal control, and **Dennis Collins** (Puerto Rico) in mathematical biology. • Congratulations are in order to **Glenda Lappan** for the Louise Hay Award, to **T. Y. Li** for a Guggenhiem Fellowship, and to **Sheldon Axler** for the Lester R. Ford Award for Articles of Expository Excellence (for his article "Down With Determinants"). • The V. G. Grove Research Library has recently been renovated. • All are invited to visit the department's WWW home page (`http://www.math.msu.edu/`), winner of a recent "Geek of the Week" award.

Michigan Technological University [reported by Lynn Murphy]

New faculty include **Jianzhong Gene Cao**, **Jeffrey J. Holt**, and **Francois Margot**. • **Daniel S. Moak** and **Robert Peszek** have resigned, and **Robert Spahn** has retired. • **Beverly J. Baartmans** and **Michael J. Gilpin** were promoted to professor, while **Lee W. Erlebach** was promoted to associate professor. • **Anant P. Godbole** is on leave for the fall quarter at MSRI, and **Sidney W. Graham** continues his leave at NSF this year. Also, **Beverly** and **Alphonse Baartmans** are taking a sabbatical leave in the winter and spring quarters, and **Clark Givens** is taking his in the spring. • The following visiting faculty are on campus: **Boyd Coan**, **Edem Ibragimov**, **Yury Ionin**, **John P. McSorley**, and **Laurence D. Robinson**. • Guest speakers for the year include **Timothy Cale**, **Mark Lawrence**, **Robert Calderbank**, and **Asen Dontchev**. • **Donald Kreher** was awarded the Hall Medal by the Institute of Combinatorics and Its Applications; and **Vladimir Tonchev** will be an invited speaker at the Eleventh Midwest Conference on Combinatorics, Cryptography, and Computing. • The Departments of Mathematical Sciences and Computer Science are forming a Center for the Applications of Mathematics and Computation to Industry; it will feature mathematics and computation clinics, an industrial speakers seminar, and a consulting bureau.

North Central Michigan College [reported by Gary S. Kersting]

Edward Hirschenberger retired after 30 years of service. He was replaced by **Gary S. Kersting**, who returned to the state (he studied at MSU) after many years working in the space industry and higher education in California, where he was active in AMATYC and other organizations.

Oakland University [reported by Jerry Grossman]

The department now has a PhD program in the applied mathematical sciences. • Statistician **Theo Ogunyemi** was promoted to associate professor with tenure. • The Summer Camp for talented area high school students last summer was a great success and will continue next summer in approximately the same format. • Founding faculty member **James McKay** (who has been here since 1959) and 31-year veteran **Louis Bragg** are retiring at the end of this academic year. The former has been chair for the past six years, and the department is currently conducting a nationwide search for chair. • The department's home page on the web is being

constantly improved and updated (`http://www.oakland.edu/links/math/`). It includes on-line advising materials and program and course descriptions.

Olivet College [reported by Mark Bollman]
Three new adjunct math instructors have joined the department: **Doug Booth** (from Harper Creek High School in Battle Creek, who also serves as men's soccer coach), **Kirsty Eisenhart** (the new Math Center director, from Cecil Community College in Maryland), and **Betty Karpulis** (after a stint with the Peace Corps in Jamaica, who is also serving as a Community Life Associate in the residence halls). • Faculty and students voted to give **Mark Bollman** the college's faculty teaching award last spring.

Saginaw Valley State University [reported by John Mooningham]
Five faculty openings were filled this year. **Thomas Zerger**, who has been a lecturer at SVSU for the past two years, completed his PhD in algebraic geometry at Oklahoma State University and has been appointed assistant professor. **Michael S. Gilbert** and **Steven J. Sepanski** were also appointed to assistant professor positions; the former received his PhD in commutative ring theory from the University of Tennessee, Knoxville, and the latter earned his doctorate at Texas A&M in probability and statistics. Finally, **David Schall** and **Irmgard Redman** were named lecturers; the former holds an MAT and an MA in mathematics from Kent State, and the latter received her PhD in ring theory from the University of Wisconsin at Milwaukee.

Siena Heights College [reported by Toni Carroll]
Kevin Burke resigned and took a position at Northern Louisiana University. Applied mathematician **Rick Trujillo** has joined the faculty. • **Lana Taylor** has been awarded a sabbatical leave for the second semester, to develop materials integrating art and mathematics.

University of Michigan–Ann Arbor [reported by H. Montgomery]
There are many new faculty filling various regular and visiting positions this year: **Michael Artin**, **Piotr Bizon**, **Petra Bonfert**, **Giuseppe Castellacci**, **Michael Cole**, **John Dean**, **Charles Doering**, **Xianghong Gong**, **Richard Jordan**, **JongHae Keum**, **Ulrich Kohlenbach**, **Bryna Kra**, **Kenneth Lange**, **Kristin Lauter**, **Ali Naddaf**, **Vijay Pant**, **Madabusi Raghunathan**, **Niranjan Ramachandran**, **Aravamuthan Sarangarajan**, **Nessim Sibony**, **Karen Smith**, **James Sneyd**, **Dennis Stowe**, **Rodney Worthing**, and **Tonghai Yang**.

University of Michigan–Dearborn [reported by Margret Hoft]
John Gillespie is on sabbatical this year, and **Michael Lachance** and **Roger Verhey** have returned from their sabbaticals taken during 1995–96. • The department has redesigned its program in Computers and Computational Mathematics. It is also involved in a campus project called Institutionalization of Innovative and Effective Instructional Reform, which aims at improving teaching in science, mathematics, and engineering and has received a $200,000 grant from

NSF. • **Frank Massey** and **Jennifer Zhao** are organizing (with **Daoqi Yang** from WSU) a special session on "Partial Differential Equations: Theories, Applications and Numerical Approaches" for the AMS regional meeting at WSU in May. • **Eileen Kaller** received the campus distinguished teaching award last year, and one of two Chancellor's Medallion awards to graduating seniors went again last year to a mathematics major, **Andrew Christlieb**.

University of Michigan–Flint [reported by Steve Althoen]

Ricardo Alfaro is on sabbatical leave, visiting Hokkaido and Okayama Universities in Japan and Universidad del Comahue in Argentina. • The 30th annual Math Field Day will be held on March 4. This day-long mathematics competition includes three individual and four team events. Any secondary school in Michigan can send a team of five students and one advisor. Contact **Robert Bix** for details (810-762-3314).

Wayne State University [reported by Daniel Frohardt]

George Yin has been promoted to professor. **Patricia Bonesteel**, **Chris Nazelli**, and **Donald Sherry** have been appointed lecturers for 1996–97. • **Togo Nishiura** retired last May, and **Lisa Langsetmo** resigned. **Leon Hanin** and **Nikolai Moschuk** are visiting for the year. • Former faculty member **James Kelleher** died in September. • **Pao-Liu Chow**, **Choon Jai Rhee**, and **Stephen Williams** are on sabbatical leave for the fall; for the winter, **Charles McGibbon** is on sabbatical and **Kay Magaard** has a leave of absence to take a Rosenbaum fellowship at the Isaac Newton Institute at Cambridge University. • There is a full lineup of speakers and visitors for the fall term, including **Robert Fefferman** from Chicago and **Edward Effros** from UCLA. The current colloquium schedule can be found from the department's web page (`http://www.math.wayne.edu`). This page will also contain information on the joint meeting of the Michigan Section with the AMS, May 2–4, which the department is hosting. • **Larry Brenton** and **Steven Kahn** recently won teaching awards. • The department has decided to require graphing calculators for all students in the standard calculus sequence, and it has instituted a mass final examination in its Calculus I course.

Western Michigan University [reported by John Petro]

Theresa (Terry) Grant from the University of Delaware (PhD in mathematics education), **Srdjan Petrovic** from Indiana University (PhD in operator theory from UM-Ann Arbor), and **Ping Zhang** from the University of Texas at El Paso (PhD in combinatorics from MSU) are new assistant professors in the department. • **John R. Martino** has been promoted to associate professor. **John W. Petro** has been appointed chair of the department and **Ruth Ann Meyer** has returned to regular teaching duties in the department. • **S. K. Kapoor** will retire in December after 29.5 years service in the department. • With regret the department reports the deaths of two former faculty members. **Professor Emeritus James H. Powell**, a faculty member from 1955 to 1988, died in April. Professor Powell was chair of the

department for 12 years, Associate Dean of Arts and Sciences for 3 years, and served as chair of the Michigan Section in 1966–67. **Professor Emeritus Joseph C. McCully**, a faculty member from 1956 to 1987, died in July. The department also regrets the news of the death of **Paul Erdös**, long-standing friend and associate of the department, on September 20 in Warsaw, Poland. Plans are under way to hold a special colloquium in his honor later in the year. • **Yousef Alavi** has received the Alumni Distinguished Teaching Award. • Approximately 300 people, including **Paul Erdös**, attended the Eighth Quadrennial Conference on Graph Theory, Combinatorics, and Algorithms, held at WMU in June. **Yousef Alavi**, who has co-directed these conferences over the past 28 years, was recognized for his work on highly irregular graphs. • Approximately 175 people attended The Fourth Great Lakes Symposium on the topic Experimental Design: Medical and Industrial, held in the Radisson Plaza Hotel in Kalamazoo in October. The Symposium was sponsored by WMU, Parke-Davis, Pharmacia and Upjohn, Inc., and The Trilogy Corporation. • Approximately 50 people attended the Midwest Topology Seminar held in October. **Haynes Miller** (MIT) was the principal speaker and Distinguished Visiting Scholar. Other speakers were **Charles Rezk** (Northwestern University), **Jie Wu** (University of Toronto), and **Dariusz Wilczynski** (Nortre Dame). • Recent colloquia speakers include **Charles McGibbon** (WSU), **James Pan** (Oakland U), and **John Birge** (University of Cincinnati). • **Mike Slack** has developed the departmental web page (`http://www.wmich.edu/math-stat/`).

Axler Wins MAA Writing Award

Sheldon Axler (MSU) was presented with one of last year's three Lester R. Ford Awards at MathFest '96 in Seattle. Established in 1964, these awards, consisting of a citation and a cash prize, are presented by the national MAA for articles of expository excellence published in *The American Mathematical Monthly*.

Axler received the prestigious award in recognition for his article "Down With Determinants!" (volume 102, 1995, pp. 139–154). The citation notes: "In this paper, Sheldon Axler shows explicitly how an undergraduate course can analyze the structure of a complex matrix directly. [In] the end, we see how to obtain determinants from the structure theorems, and we have a clearer view of the whole subject."

Some members may recall that Sheldon gave a talk with the same title at the Annual Meeting of the Michigan Section in April 1994 at Alma College.

Building Bridges in Mathematics: A Dialogue Between High Schools and Colleges

The conference at the Holiday Inn South in Lansing on November 16 attracted 80 registrants—54 from colleges (including two admissions counselors) and 26 from high schools. While this particular conference was the brain child of **Roger Verhey** (UM-Dearborn), the Four-Year College Vice-President of the Michigan Council of Teachers of Mathematics, the conference is actually a sequel to a strand begun at the 1996 annual meeting of the Michigan Section of the MAA and MichMATYC.

The morning began with an overview by **Chuck Allan** (Michigan Department of Education) on national and state initiatives at the high school level. It was followed by presentations on the Core-Plus Mathematics Program (**Mike Shelly** and **Cathy King** of Andover High School in Bloomfield Hills), on the Integrated Mathematics program (**Irene Besancon** of Fordson High School in Dearborn), and on the University of Chicago School Mathematics Project (**Bruce Budzynski** of Ludington High School).

Each participant was assigned to a table of eight, and each table had college as well as high school faculty. Throughout the day, much information was shared at each table in an informal and congenial atmosphere.

Following lunch, **David Smith** (Duke University) presented his thoughts on changes that colleges need to consider in curriculum, pedagogy, admissions, placements exams, and the use of technology. In particular he emphasized the dangers of a possible mismatch between a student's experience and expectations versus the reality encountered at his or her college of choice. The suggestion was made that college math departments should put on their web pages the extent to which they embrace cooperative learning, technology, and writing across the curriculum.

The final speaker of the day was **Chuck Vonder Embse** (CMU). As usual, Chuck wowed the audience with a demonstration—this time of Cabri Geometry on a Macintosh laptop.

Renate McLaughlin

Erdös Materials Sought

As most mathematicians probably know by now, **Paul Erdös** died in September at the age of 83. This consummate problem solver and problem poser, inventor of probabilistic methods in discrete mathematics, the first person (with Selberg) to give an elementary proof of the prime number theorem, founder of Ramsey theory, and author of more than 1400 books and papers, was no stranger to Michigan. Kalamazoo was one of his many homes throughout the world; **Yousef Alavi**, **Allen Schwenk**, and others from Western Michigan University saw to many of his mathematical, health, and worldly needs.

Paul had participated in the Eighth Quadrennial Conference on Graph Theory, Combinatorics, and Algorithms at WMU in June. On the penultimate day of that meeting, he collapsed during a morning session and was taken to the hospital. His friends and doctors convinced him to have a pacemaker installed. By that evening he had recovered enough to attend the conference banquet in his honor and give a short talk on some of his recollections of collaboration over the years. Paul's talk followed a presentation by **Ron Graham** (AT&T) and **Jerry Grossman** (Oakland U) on Erdös numbers; an expanded version of these remarks, as well as the most complete and up-to-date bibliography of Erdös's publications, will appear this fall in Springer's two-volume collection, *The Mathematics of Paul Erdös,* which Ron co-edited.

A tribute to Paul Erdös is planned for the Spring *Newsletter*. Anyone with anecdotes, interesting facts, or memories of Paul—or anything else that might be of interest in such an article—should send them to the editor.

Meanwhile check out the Erdös Number Project site on the world wide web (`http://www.oakland.edu/~grossman/erdoshp.html`). Jerry Grossman and **Patrick Ion** (*Mathematical Reviews*) have put together a list of the nearly 500 mathematicians and computer scientists with "Erdös number 1" (i.e., people who have written a joint paper with Paul) and the nearly 5000 people having Erdös number 2 (the other collaborators of the people who have Erdös number 1). This web page also has a collection of obituaries and related materials and links.

Michigan Participates in the American Mathematics Competitions (AMC)

Matt Wyneken (UM-Flint) reports that Michigan participation in the AMC continues to grow. Over 17,000 Michigan students participated in the American Junior High School and High School Mathematics Examinations (AJHSME and AHSME) in 1995–96. The Michigan AMC winners were honored last June at a reception in Lansing hosted by **Governor John Engler**.

A total of 12,867 students from 202 Michigan schools participated in the 1995–96 AJHSME, again ranking Michigan first in the national registration figures. National Honor Roll recognition went to 148 Michigan students, and 794 received Michigan Honor Roll certificates. The following four Michigan students all tied with perfect scores: **Rishi Mukhopadhyay** and **Preetham Reddy** of Detroit Country Day Middle School in Beverly Hills, **Terry Shih** of Boulan Park Middle School in Troy, and **Galen Stevens** of West Middle School in Holland.

The 12th annual AJHSME was held on November 21, 1996. Wyneken and **Kristina Hansen** (UM-Flint) serve as Michigan's AJHSME Coordinators.

At the senior high level, a total of 4472 students from 103 Michigan schools participated in the 1995–96 AHSME, with 216 students making the National Honor Roll. **Christopher Peikert** of Loy Norrix High School and the Kalamazoo Area Mathematics and Science Center was Michigan's winner. The 48th annual AHSME is scheduled for February 13. Michigan's AHSME Coordinator is **David Laverell** of Calvin College.

Here are two sample questions from the AHSME:

There exist positive integers A, B, and C, with no common factor greater than 1, such that $A \log_{200} 5 + B \log_{200} 2 = C$. What is $A + B + C$? The multiple choices are 6, 7, 8, 9, and 10.

If $f(x) = ax^4 - bx^4 + x + 5$ and $f(-3) = 2$, then what is $f(3)$? The multiple choices are -5, -2, 1, 3, and 8.

Positions Available

Alma College is conducting a national search for a tenure-track position, with preference for someone in applied or computational mathematics.

Central Michigan University is looking for a chairperson.

Eastern Michigan University will have a position in mathematics education.

Grand Valley State University has tenure-track openings in mathematics and in statistics.

Hillsdale College has an opening at the assistant professor level. A PhD is required, with a specialty in applied mathematics and a strong commitment to excellence in teaching undergraduate mathematics.

Hope College is seeking both a department chairperson and a tenure-track faculty member. An advertisement for these positions can be found on the department's World Wide Web site (`http://www.cs.hope.edu/~vanwyk/search.html`).

Kalamazoo College has two tenure-track openings—one in computer science and one in mathematics. An appropriate PhD degree is required for each. In addition to teaching, ideal candidates will develop an active research program that involves undergraduate student participation.

Lawrence Technological University has a tenure-track assistant professor position in computer science for 1997–98; PhD required. The candidate will assist with developing a CS masters program. Strong teaching potential or experience is desired in the fields of databases, networks, and programming languages.

Lansing Community College has a temporary full-time opening for someone to teach computer science (plus one section of mathematics or statistics) in spring, 1997; a masters degree and experience are required.

Michigan Technological University has a statistics opening at the assistant professor level.

Oakland University is conducting a national search for chairperson.

It also has at least one tenure-track opening, with an emphasis on attracting people who can contribute to its new PhD program in applied mathematical sciences, especially applied discrete mathematics.

University of Michigan–Dearborn has one tenure-track opening for 1997–98 in mathematics education at the assistant or associate professor level. It requires a doctorate in mathematics education; and a focus in mathematical methods at the elementary level, as well as K–8 teaching experience, is preferred.

Western Michigan University has three new tenure-track positions at the assistant professor level beginning Fall 1997: one in analysis with an emphasis in partial differential equations, one in combinatorics/graph theory, and one in statistics.

Section Dues: Individual • Institutional

The 1996-97 individual and institutional membership dues for the Michigan Section are now being accepted. The $10 individual dues payment (or $25 contributing member payment) and the $30 (small school) or $50 (large school) institutional dues help support the activities of the Section such as its Annual Meeting and Newsletter. This coupon may be used to submit dues payments. If you do not recall if you have paid your dues for 1995-96, you may also use this form to ask the Secretary/Treasurer about your dues status.

Enclosed is a check for:

- Regular Dues @ $10 ❑
- Contributing Membership @ $25 ❑
- Small Institutional Dues @ $30 ❑
- Large Institutional Dues @ $50 ❑

I've forgotten! Please send a report of my 1995-96 dues status. ❑

Name: _____

Institution: _____

Mailing Address _____

_____

Make checks payable to the Michigan Section–MAA, and mail them to: **Bette L. Warren, Secretary/Treasurer, Michigan Section—MAA, Department of Mathematics, Eastern Michigan University, Ypsilanti, MI 48197.**

Nominations Sought for Distinguished Teaching Award

Nominations for the sixth (1997) Award for Distinguished College or University Teaching of Mathematics from the Michigan Section of the Mathematical Association of America are now being accepted. The Distinguished Teaching Award Committee will choose one of the nominees for the Section Award.

The awardee will be honored at the Spring meeting of the Section and will be widely recognized and acknowledged within the Section. The awardee will also be the official Section candidate for the pool of Section awardees from which the national recipients of the MAA Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics will be selected, except that one of the national winners may be selected from another source. Each of the (at most three) national awardees, will be honored at the national MAA meeting in January 1998 and receive a $1000 check and a certificate. The section awards for the past five years have gone to **Elliot Tanis** (Hope College), **Doug Nance** (CMU), **Jerry Grossman** (Oakland U), **Sid Graham** (Michigan Tech), and **Art White** (WMU).

Anyone (other than the candidate him/herself) is entitled to make a nomination. Any college or university teacher assigned at least halftime during the academic year to teaching a mathematical science in a public or private college or university (from two-year college teaching through teaching at the PhD level) is eligible, provided he or she has at least five years teaching experience in a mathematical science and is a member of the MAA.

The nominees should be widely recognized as extraordinarily successful in their teaching (interpreted in its broadest sense), have had teaching effectiveness that can be documented, have had influence in teaching beyond their own institutions, and foster curiosity and generate excitement about mathematics in their students.

Please send your nominations by January 1 to **Sidney W. Graham**, Division of Mathematical Sciences, National Science Foundation, 4201 Wilson Blvd., Room 1025, Arlington, VA 22230-0001 (swgraham@mtu.edu; 703-306-1876; fax 703-306-0555).

The Ohio State University College Short Course Program

The Ohio State University College Short Course Program—affiliated with the Teachers Teaching With Technology Program—will be funding many 3- and 5-day short courses throughout the United States in 1996–97. Applications are now being taken for host site colleges.

Courses include appropriate content material for the developmental level (DEV using the TI-83), for the college algebra/trigonometry level (ALGT using the TI-83), for the precalculus and calculus level (PCALC-CALC using the TI-83 or TI-85), and for the calculus level (CAS-CALC using the TI-92). Participants will learn how to use Texas Instruments hand-held technology to enhance the teaching and learning of mathematics. Each course will contain some use of the CBL to collect "real" data for the purpose of mathematical analysis. The DEV, ALGT, and PCALC-CALC courses will also include an introduction to the TI-92 and the latest graphing calculators from Texas Instruments.

Pedagogical, testing, and implementation issues are addressed in all courses. Some AMATYC Standards recommendations will be implemented in appropriate courses. The 3-day courses may be held during the academic year, and 3- or 5-day courses may be offered during the summer of 1997. Mini-grant application forms are available at two web sites (`http://www.math.ohio-state.edu/Entities/Organizations/TCSC/index.html` and `http://www.ti.com/calc/docs/shrt.htm`).

Hard copies of the application form can be obtained from **Bert Waits** and **Frank Demana** through **Ed Laughbaum** at The Ohio State University, 231 West 18th Avenue, Columbus, OH 43210 (`elaughba@math.ohio-state.edu`).

Call for Nominations

Nominations for the Michigan Section's **Distinguished Service Award** are being accepted. Please submit your nominations by January 19, 1997 to **Thomas J. Miles**, Department of Mathematics, Central Michigan University, Mount Pleasant, MI 48859 (`t.miles@cmich.edu`; 517-774-3596).

Call For Papers

The Michigan Section of the MAA and MichMATYC invite papers from students and faculty for the next combined Annual Meeting, to be held jointly with the Central Section Meeting of the AMS.

WAYNE STATE UNIVERSITY

DETROIT, MICHIGAN

May 2–3, 1997

Please send the title and a short description or abstract to:

Matthew F. Wyneken	Phone:	810-762-3313
Department of Mathematics	Fax:	810-762-3687
Univ. of Michigan–Flint	E-mail:	mwyneken@umich.edu
Flint, MI 48502-2186		

Papers may be up to 15 minutes in length. Please include your name, affiliation, home or office address, phone numbers, and e-mail address. There will be a separate session for UNDERGRADUATE papers. You will receive a form asking you about the equipment you need for your presentation. If you have any questions, please contact Matt Wyneken.

The deadline for abstracts is Friday, January 17, 1997.

Undergraduate papers may be submitted until March 21, 1997. However, only those received by the January 17 deadline will be assured of inclusion in the advance program.

COMMITTEES AND APPOINTMENTS

Michigan Section
Mathematical Association of America

Contact Information

Executive Committee

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Contact the Section Chair for up-to-date information.

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