



Ohio Focus

The MAA Ohio Section Newsletter

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Ohio MAA and Great Lakes SIAM to Meet Together at the University of Toledo



South view of the Memorial Field House where the meeting will open. The clock tower from University Hall is in the background

The 98th Annual Meeting of the Ohio Section of the MAA will take place April 4 - 5, 2014 at the University of Toledo in Toledo, Ohio. This gathering stands out because it is a joint meeting with the Great Lakes Section of SIAM (Society for Industrial and Applied Mathematics). With the first invited address at 1:45 p.m., Friday speakers include **Michael Dorff** (Brigham Young University), **Steve Goldner** (First Technology Safety Systems), and **David Lamb** (Tank-Automotive Research, Development, and Engineering Center). After the banquet, there will be a panel discussion on the theme: *A Mathematics Education, Today's Industrial Opportunities*. **Charles Groetsch** (The Citadel) and **Phil Blau** (Shawnee State University) will provide major addresses on Saturday morning. There will also be contributed paper sessions on both Friday afternoon and Saturday morning for meeting participants. Graduate and undergraduate students in mathematics, mathematics education, or related fields are encouraged to attend.

Upcoming Bylaws Revision Plans

Every 10 years, each Section of the MAA is required to review their bylaws and revise them as appropriate. The Ohio Section is scheduled to complete this review in 2014-2015. We must submit a draft of any revisions to the MAA Committee on Sections in December of 2014. The revised bylaws will be presented formally to the Section at the Spring 2015 meeting, and the Section membership will vote on the revisions following that meeting. Unless there are significant problems or inconsistencies in the revised bylaws, the MAA Board of Governors will approve them at MathFest in 2015.

At the Spring 2014 Ohio Section meeting, the Executive Committee will appoint a Bylaws Committee to study and propose changes to the Section bylaws. The committee will do most of its work over the summer, with the goal of having a draft available for comments in the Fall 2014 *Ohio Focus*.

The current Ohio Section bylaws are on the Section website, at <http://sections.maa.org/ohio/byLaws.html>. If you are interested in serving on the bylaws committee, or if you have comments or suggestions for bylaws revisions, please contact Barbara D'Ambrosia, the Ohio Section Governor, at bdambrosia@jcu.edu, or Phil Blau, the Ohio Section President, at pblau@shawnee.edu.

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Section Governor's Report



The Joint Mathematics Meetings in Baltimore were, as always, a vibrant gathering of mathematicians. I attended many good talks, caught up with friends from other institutions, and came away enthused about trying some new things with my students. I also had the pleasure of attending the Joint Prize Session, where

Aparna Higgins was awarded the MAA Certificate of Meritorious Service. The citation for her award appears elsewhere in this newsletter. As many of you know, Aparna's term as Director of Project NExT expires in August 2014, and a new Director will be named sometime in the next few months.

Here are some highlights from the Board of Governors meeting that was held on Tuesday, January 14:

- The MAA Travel Study Program has been discontinued. Similarly, the MAA Short Course that has been traditionally held on the several days before MathFest and the Joint Mathematics Meetings has been discontinued. While both of these programs were beneficial to the people who participated in them, the number of participants has been disproportionate to the amount of MAA resources, particularly staff and volunteer time and effort, required to support them.
- The Board of Governors endorsed recommended qualifications for teaching a modern introductory statistics course, as described in a report from the AMS/MAA Joint Committee on Undergraduate Statistics. Presumably, these recommendations will be available on the ASA and MAA websites in the near future. Ideally, anyone who teaches undergraduate statistics would have at least a master's degree with a strong emphasis on statistics. Since this is frequently not feasible, the recommendation is that anyone teaching an introductory statistics course should have at least the equivalent of two statistical methods courses and experience with data analysis beyond that which is taught in the introductory course. There are a number of resources available to help (mathematics) faculty prepare to teach introductory statistics, including MAA

PREP workshops.

- Moving the MAA customer service function in-house has been deferred until next year.
- Several people are retiring from key positions before the end of the year. Steve Dunbar is stepping down as Director of Competitions, and Ivars Peterson is retiring as Director of Publications. The MAA is actively recruiting to fill these two positions.
- The AMC (American Mathematics Competition) has piloted an online tournament for high school students. There was enthusiastic support from students, and this competition will likely become a regular offering of the AMC program.
- The governors spent some time in break-out sessions discussing portions of the draft CUPM (Committee on the Undergraduate Program in Mathematics) Curriculum Guide, which will be finalized by the time of the Joint Mathematics Meetings in 2015.
- The governors also spent some time reflecting on the nature of MAA governance. This is the first step in determining whether and how MAA governance should change as we face the "new normal" of declining membership and revenue.

As I've reported elsewhere in this newsletter, the Ohio Section will likewise reflect on its primary governance document, the Section Bylaws, in the coming months.

I'll end this report with the traditional appeal for people to serve on MAA committees. No matter what your interests are, there is almost certainly an MAA committee for you. Start at <http://www.maa.org/about-maa/governance/council-and-committees-list> and click the links to the various councils to see a complete list of MAA committees. When you find a committee on which you would like to serve, you can either let me know, or you can nominate yourself by following the link to the Committee Nomination Form, at <http://www.maa.org/community>.

*Barbara D'Ambrosia
John Carroll University
Governor of the Ohio Section
bdambrosia@jcu.edu*



President's Message

I hope everyone is having a productive and fulfilling term. Despite the bitter cold and large snowfall of the past few weeks, it is time for the Spring *Focus*.



I want to thank all who made the Fall meeting at Cleveland State such a success. We all owe a debt of gratitude to Barbara Margolius for taking care of all the local arrangements. Thanks also go to John Holcomb, the Department Chair. I compliment the program committee, led by Lew Ludwig, for all their work in arranging for such interesting invited talks and organizing the contributed talks, as well as all the work in printing of the programs. Richard Cleary, Tim Chartier, and Harold Putt gave excellent talks, and Tim Chartier's use of mime to explore mathematical ideas was a very engaging presentation after the banquet. While a medical situation prevented Brad Hartlaub from completing his talk, I am happy to report he has been fine since. After the meeting, Carol Shumacher facilitated a workshop on Inquiry

Based Learning to Teach Mathematics and Thinking. Around ten people participated and the feedback could not have been more positive. This is the third time that CONSACT has offered a fall workshop; if you are interested in serving on this committee or have ideas for a future workshop, then please contact the CONSACT chair, Barbara Margolius.

A major project ahead is the required decennial review of the section's bylaws. A draft of revised bylaws needs to be submitted to the Committee on Sections by December, with a second draft to be voted on by the section at the Spring 2015 meeting. Thoughtful input from the membership is needed to revise the existing bylaws to allow the section to run even more effectively. The primary task immediately before the executive committee is how to best do the foundational work that will allow the membership to provide the necessary feedback within this timeframe. Towards this end, we are seeking volunteers to serve on a bylaws committee to work over the summer on revisions. Please see the announcement in this newsletter for details.

Beyond the bylaw revision is the Centennial Celebration, which will be at the Spring 2016 meeting. We have finalized the location. Ohio Northern University was to host the Fall 2015 meeting but has agreed to host the Centennial Celebration. This is especially appropriate, since the founder of the *American Mathematical Monthly*, Benjamin Finkel, received his undergraduate education at Ohio Northern. Through the efforts of Jon Stadler, Capital University has been

secured as the site for the Fall 2015 meeting. Continue to look for the Centennial Minutes at section meetings and in the *Ohio Focus*. Thanks to Dave Kullman and the rest of the Centennial Committee for all the work they have been doing.

I am excited about the upcoming meeting at the University of Toledo and hope to see many of you there. Consider giving a contributed talk at the meeting; details on the submission process are elsewhere in this newsletter. The meeting will be a joint meeting with the Great Lakes Section of Society for Industrial and Applied Mathematics. This is a great opportunity to establish connections between the members of the two groups. Lew Ludwig and the rest of the program committee have put together an outstanding program, including talks by Michael Dorff and Chuck Groetsch. As usual, this meeting will feature plenty of student involvement with the Leo Schneider Student Team Competition and numerous contributed talks by students. From the beginning of my involvement with our section, I have always been impressed by the level of student participation. We should be very proud of this; I am confident this will continue at Toledo.

Let me close by expressing gratitude for the opportunity to serve the section as its president. In my previous service to the section, I have been aware of all the effort put forth by our many members who actively participate, which allows the section to function effectively. Serving as President has definitely heightened my appreciation; as with

(Continued on page 17)

Call for Contributed Papers

Fifteen-minute presentations on any topic of general interest in mathematics or related areas are encouraged for the Contributed Paper Sessions on Friday afternoon and Saturday morning at the annual Ohio Section meeting.

Reports on projects, research announcements, or anything you believe would be of interest to those in attendance are welcome. Contributors should send a title and brief abstract by Friday March 21, 2014. Online submission with your meeting registration (at <http://sections.maa.org/ohio/>) is strongly preferred, but if necessary, you may submit your title and abstract to the chair of the Program Committee, Lew Ludwig, by e-mail at ludwigl@denison.edu, or by U.S. mail at Department of Mathematics and Computer Science, Denison University, 100 South Loop Road, Granville, OH 43023.

Abstracts should be between 25 and 75 words in length and should employ proper English grammar and spelling. One speaker per session is greatly preferred, but two speakers in one session can be accommodated if necessary. Please use only plain text in your title and abstract as the abstract submittal system cannot process TeX or other graphics code.

Each presentation room will have a PC, a computer projector, and laptop connections. Presenters can either plug their laptops into the overhead projection system or plug a flash drive into the resident computer. Internet access will be provided. Speakers with specific questions about technology availability should contact Jim Anderson at jim.anderson@utoledo.edu. You may submit abstracts online at the Section web page: <http://sections.maa.org/ohio>.

Letter From Brian Winkle, Director of SIMIODE

We believe we can build a community and make the teaching of differential equations more reasonable and usable! Come join our merry band at www.simiode.org.

We would like to introduce you to an exciting project: SIMIODE - Systemic Initiative for Modeling Investigations and Opportunities with Differential Equations. SIMIODE is about teaching differential equations using modeling and technology upfront and throughout the learning process. Learn more at our dynamic website, www.simiode.org, where we offer a community in which colleagues can communicate, collaborate, publish, teach, explore, contribute, etc.

We are building a complete environment for teachers and learners – communication, groups across and intra/inter campus projects for students and teachers, models, data, videos. For the latter see our YouTube videos at http://www.youtube.com/channel/UC4y1q6ShHljRUM7NrM9_dOg where students can collect data on Torricelli's Law and model it with a first principle physics approach for building a differential equation.

Once inside www.simiode.org you can see all the material associated with the Torricelli's Law video in the Modeling Scenario section of our Resources found on our home page. Check out SIMIODE and also check out our very interesting way of starting a differential course with the student version of the Modeling Scenario on M&M Death and Immigration.

Join a group, start a group, begin a discussion, and then collaborate and communicate with others who are

interested in teaching differential equations using modeling and technology. Join SIMIODE! It is FREE!

We also have a Manuscript Management system, FastTrack, (<http://simiode.expressacademic.org>) which handles reviews of material submitted to SIMIODE. We need your help to build this community of innovative educators:

1. Please register as a referee.
2. Please contribute to this community as an author.

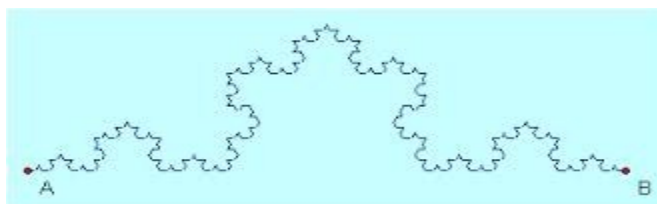
Brian Winkel, Director – SIMIODE,
BrianWinkel@simiode.org, www.simiode.org

Minicourse Announcement for MathFest 2014 Portland OR

Announcing Mathematical Association of America Four Hour Minicourse #6 SIMIODE - Systemic Initiative for Modeling Investigations and Opportunities with Differential Equations – Building Community

2014 MathFest, Portland OR, 7-9 August 2014
Sessions run Thursday August 7 and Friday August 8 from 1 - 3 p.m.

See MAA FOCUS Magazine April/May 2014 issue for details or contact BrianWinkel@simiode.org.



Registration Information for Spring 2014 Meeting

Online registration is preferred. Visit the Section web site at <http://www.maa.org/Ohio> on or after Friday, February 21, for one-stop registration, banquet reservation, and abstract submission. The deadline for meeting pre-registration and banquet reservations is March 28. Abstracts for contributed papers must be submitted by March 21.

On-site meeting registration is always available, but last-minute banquet tickets cannot be guaranteed. Early registration helps those making the meeting arrangements and is always appreciated. Registration will be held beginning 12:00pm on Friday in Memorial Field House (on the east side of the building) and will continue Saturday morning at 8:00am.

Meeting participants who are unable to register online at <http://www.maa.org/Ohio> may register by mail by sending the following information: name, affiliation, address, phone, e-mail address (if any), type of position, and banquet buffet reservation. Send with check, payable to Ohio Section MAA, for applicable fees [registration fee (\$30 ordinary registration, \$15 retired or part-time, no fee for students or first-time attendees), banquet fee (\$25 per person)] to:

Ohio Section MAA Spring Meeting, c/o Jim Anderson
Department of Mathematics and Statistics, Mail Stop 942
The University of Toledo

2801 W. Bancroft, Toledo, OH 43606-3390

Phone: (419) 530-7296, FAX: (419) 530-4720.

Department phone and FAX numbers are (419) 530-2568 and (419) 530-2232, respectively. Registration by FAX or e-mail will be pending receipt of registration fees.

Please note that there will only be 75 banquet tickets available because that is the maximum seating capacity for the Main Dining Room in Libbey Hall.

Panel Discussion with SIAM

After the banquet on Friday night, there will be a panel discussion provided by the Great Lakes Section of SIAM. The theme is *A Mathematics Education, Today's Industrial Opportunities*. The panel members include David A. Lamb, Steve Goldner, Charles Groetsch, and Emmanuel Tsimi. Bearing in mind that a mathematics education develops a toolset and a mindset that provides an advantage in any field of employment, they will each briefly describe their journey from being a student to building an industrial career, what they learned on the job, what they brought to the job. Then, they will answer the question: "If you were planning to enter the industrial workforce today, how would you prepare? Where would you look?"

Questions from the audience will be welcomed.

Ohio Section Nominee for the 2015 Haimo Awards

Traditionally, the winner of the Ohio Section's Teaching Award is nominated by the Ohio Section for the MAA's Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics. Recently, the nomination deadline for the Haimo Awards was moved up to March 1. Since the Ohio Section Teaching Award winner will not be announced to the Section until well after this date, the Executive Committee has decided that from now on, the winner of the Ohio Section Teaching Award will be nominated for the Haimo Awards by March 1 of the year following his/her win.

This is the first year in which this policy is in effect. In order for the Ohio Section to have a nominee for the 2015 Haimo Awards, a committee consisting of the elected officers of the Section and chaired by Wiebke Diestelkamp, current chair of the Ohio Teaching Award Committee, was tasked with choosing the nominee. All recent winners of the Ohio Section Teaching Award were considered. After difficult deliberations, the committee chose **Lew Ludwig** of Denison University as the Ohio Section's nominee for the 2015 Haimo Awards. Please join the committee in congratulating Lew on his nomination.

OHIO FOCUS

The newsletter of the Ohio Section of the Mathematical Association of America first appeared in 1973 and is published twice yearly, in time to reach members before the fall and spring meetings. Newsletters are published online at www.maa.org/Ohio. Notification postcards are sent using labels provided by the MAA.

Editor: David Stuckey

419-783-2464

dstuckey@defiance.edu

Defiance College

701 N Clinton

Defiance, OH 43512

The deadline for the next newsletter is **August 15, 2011**. E-mail copy is preferred. Early submission is appreciated. Please send copy to the editor (see above), and also to the Section Webmaster, Darren Wick (dwick@ashland.edu), for posting on the web.

Activities and Opportunities of Interest to Students

Leo Schneider Student Mathematical Competition

Undergraduate students from institutions of the Ohio section are invited to participate in the fourth annual Leo Schneider Student Mathematics Competition. This will be the eleventh year for the Ohio MAA student team competition, but its name now honors the memory of our late colleague and friend.

This year's competition will take place on Friday from noon until 1:20. Rules and registration information, as well as copies of previous years' problems and their solutions, can be found on the Ohio Section Student Member website, <http://constum.ohiomaa.org/>. Cash prizes (\$150 for first place, \$120 for second, and \$90 for third) will be awarded on Saturday to the top three teams. We encourage student participation in the entire meeting, including student talks, the student pizza party, and the "awards ceremony" on Saturday. Any questions about the competition or other student activities can be addressed to Ryan Rahrig at r-rahrig@onu.edu.

Try your hand at this problem from the 2013 Leo Schneider Student Mathematics Competition: Solutions are available at the CONSTUM website, <http://constum.ohiomaa.org/>.

Problem 7: A random number generator randomly generates integers from the set $\{1, 2, 3, \dots, 9\}$ with equal probability. Find the probability (with explanation) that after n numbers are generated, the product is a multiple of 10.

History of Mathematics Student Writing Contest

SIGMAA-HOM is pleased to announce that the 11th annual Student Paper Contest in the History of Mathematics is officially open! The purpose of this contest is to increase awareness of and interest in the history of mathematics among undergraduates, and to encourage students to learn more about an area in the history of mathematics of their choosing. First and second place winners will receive a one-year student membership in the MAA and the Canadian Society for the History and Philosophy of Mathematics.

Please encourage your current or past students with great essays -- or the potential to write great essays -- to submit them to the contest. Submissions must be received by March 19, 2014. Submissions and any questions about the contest should be directed to Dr. Dominic Klyve (klyved@cwu.edu). More information is available on the SIGMAA-HOM website (<http://historyofmathematics.org>).

Talks by Students

Undergraduates 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 a co-op experience, or the results of a research project. One speaker per session is greatly preferred, but two speakers in one session can be accommodated if necessary. Each student speaker will receive a certificate acknowledging their contribution to the meeting.

Contributed talks by students, faculty, and others will be given on Friday afternoon and Saturday morning. Talks will be scheduled primarily according to topic and audience level. Student talks are an integral part of the meeting and should be an enjoyable and rewarding experience for all who participate.

See the Call for Contributed Papers on page 4 for submission information. Suggested resources to have an effective talk can be found on page 17.

Student Pizza Party

A student pizza party will be held Friday evening at 6:30. There is no charge, but meeting registration is necessary. See the Section webpage at www.maa.org/Ohio for online registration. There will be a Sudoku tournament during the pizza party for interested students.



Aparna Higgins Honored with Meritorious Service Citation

During the Prizes and Awards ceremony at the Joint Mathematical Meetings, January 2014, Aparna Higgins was recognized for her many years of excellent service to the MAA. Certificates for Meritorious Service are presented, on the recommendation of the Sections of the Association, for service at the national level or for service to a Section of the Association. Following is the citation, biography and Aparna's response as printed in the program.

Aparna Higgins is probably best known within the MAA for her work with Project NExT. She was a codirector of the program 1998–2009 and is currently the director. As such, she has influenced numerous early career mathematicians. Even before assuming a leadership role in Project NExT, Aparna served as a consultant and workshop presenter for early cohorts of Project NExT Fellows. Aparna has also served on numerous MAA committees, among them committees that select award winners, speakers for national meetings, and nominees for national offices. She has served on the Advisory Boards for *Math Horizons* and *Focus*, and as the chair of the Committee on Student Chapters. In the Ohio Section, Aparna has served as Section President, chair of a number of committees, and has helped with local arrangements at several Section meetings; she has given Ohio Project NExT Workshops. Aparna was recognized with the MAA's Deborah and Franklin Tupper Haimo Award for Distinguished College or University Teaching of Mathematics in 2005. She was a presenter of an MAA minicourse on undergraduate re-



search at JMM 1997 and then has been every year since 1999, many of these with Joe Gallian. Aparna has given many invited talks at various Section meetings, undergraduate conferences, and undergraduate summer research programs.

Aparna Higgins received a B.Sc. from the University of Bombay and a Ph.D. from the University of Notre Dame in 1983. She has taught at the University of Dayton since 1984, except for a few leaves of absence. Aparna directed several undergraduate Honors theses (her most fulfilling professional experiences), and she codirected NSF-sponsored REUs in 1990–91. She has presented workshops on undergraduate research at MAA Section and national meetings (often with Joe Gallian) and at Project NExT Workshops. Aparna feels lucky

to have been involved at early and crucial times in two wonderful programs of the MAA— Student Chapters and Project NExT. Aparna served on committees that created MAA Student Chapters and provided programming for undergraduate audiences at national meetings (1988–97), and she was invited by Chris Stevens to join the Project NExT leadership team in 1998. Aparna is married to Bill Higgins, with whom she enjoys attending meetings of the Ohio Section of the MAA.

I have had the good fortune of being connected to many mathematical communities, including the Ohio Section of the MAA, Project NExT, and proponents of undergraduate research in mathematics. It seems natural to help out in one's community, but one cannot do it alone. I thank all those in the Ohio Section who set a fine example for service, including the recently departed Leo Schneider, Dick Horwath, and Doug Faires. Joe Gallian has my thanks for partnering with me often to help other faculty discover the fulfillment in directing student research. I am grateful to Chris Stevens for bringing me into the Project NExT community and providing

me with one of my most satisfying, challenging, and fun service activities. I thank the Ohio Section, and in particular, Barbara D'Ambrosia and Wiebke Diestelkamp, both Project NExT Fellows now serving in the governance of the Ohio Section, for nominating me for this award. I am grateful to the MAA for this Certificate of Meritorious Service and for providing me the opportunity to participate in the leadership of two wonderful programs of the MAA—Project NExT and student activities. I appreciate the University of Dayton's support of my sustained service to the MAA. I am grateful to my husband Bill for supporting my service activities.

David A. Lamb

“Protected Mobility Optimization for the Army Ground Fleet”

The Army wants its ground vehicle fleet to be highly mobile, while also protecting the soldiers inside from both enemy activity and automotive accidents. The term for this is “protected mobility,” and TARDEC is striving to optimize the portfolio of ground vehicles in this way. A lot of the modeling and simulation (M&S) for ground vehicle engineering is used to design platforms to have optimized protected mobility. Because of the inherent complexity of the problem, the mathematics used for protected mobility optimization is interesting and challenging. This talk will discuss several ways the Army is improving the protected mobility of the ground fleet using mathematical modeling and simulation.

Dr. David A. Lamb is an applied mathematician and computer scientist working for the U.S. Army. He is the Senior Technical Expert for military ground vehicle modeling and simulation (M&S), and his personal



research is in optimization, especially optimization under uncertainty. He has a B.S. with honors from George Mason University in 1985, where he majored in mathematics. He earned a Ph.D. from the University of Wisconsin-Madison in 1992, under the direction of Prof. Ken Kunen, with a major in mathematics and a minor in computer

sciences. He is active with SAE, where he is currently the chairman of the Ground Vehicle Reliability committee, and also with SIAM, where he is the co-President of the Great Lakes Section. He has worked for the U.S. Army Tank-automotive Research, Development, and Engineering Center (TARDEC) since 1994.

Steve Goldner

“A Vehicle Impact Test Form Based on a Modified Super-Ellipse”

The physical form and use of an automotive impact testing head is based on a modified super-ellipse of the mathematical form $(X/X_0)^2 + (Z/Z_0)^3 = 1$. A comparison to the shape of an equivalent human head is given. The utility and effects of the tests and the test program on motor vehicle safety are introduced. Comparisons to other uses of standard super-ellipses are discussed.



Mr. Steve Goldner joined Humanetics in 1973 in charge of certification testing of automotive dummies. He also produced and certified radioactively loaded phantoms for simulated human safety applications. He later became Chief Test Engineer. When the Hu-

manetics' operation located in Carson, California was transferred to the Plymouth, Michigan Technical Headquarters Office he relocated as Senior Project Engineer for First Technology Safety Systems. He has been the Project Manager on a number of different ATD Pro-

grams. Steve was project engineer on the Six Year Old dummy (Part 572 Sub Part G.) His initials can be found on the drawings of the Six Year Old dummy that is contained in the legislative package today.

He has worked on the development of dummies for military programs including the “Live Fire Project”, the “Airman Manikin” and the Sea Water Immersion Manikin. He has also worked on the development of dummies for ejection seat testing and FAA commercial aircraft tests, as well as updated aerospace manikins to JPATS anthropometry, and developed new headforms using CAESAR data (JSF heads). He was involved in developing a new headform for ejection mitigation testing and lateral impact testing of side curtain air bags (18KG head). In addition, he has designed and developed test equipment for the calibration of the Hybrid II and Hybrid III dummies. One of his key roles currently is to coordinate modifications to our products per customer specifications. He also is responsible for engineering support on frontal impact dummies and various headform dummies.

He is currently serving as the treasurer of the SAFE Association. Mr. Goldner holds a Master degree in Material Sciences and a Bachelor of Science degree in Physics from the California Institute of Technology.

Michael Dorff

“How Math is Changing the World”

In Oct 2010, an article called “How much math do we really need?” was published in the Washington Post. The author, a mathematician, wrote “Unlike literature, history, politics and music, math has little relevance to everyday life” and “All the mathematics one needs in real life can be learned in early years without much fuss.” Is this true? Have you ever been asked “What can you do with a degree in math?” Besides teaching, many people are clueless on what you can do with strong math skills. In this talk, we will talk about some of the exciting things mathematicians in business, industry, and government are doing in their careers and how these things are changing the world. And we will reveal the three things that recruiters say every math student should do to get a job.



Michael Dorff is a professor of mathematics at Brigham Young University. He earned his Ph.D in 1997 from the Univ. of Kentucky in complex analysis. He was a professor at the Univ. of Missouri-Rolla before accepting a position in 2000 at BYU. He has published about 35 refereed papers and has given about 250 talks on mathematics. He is interested in

undergraduate research, in non-academic careers in mathematics, and in promoting mathematics to the general public. Currently, he directs or co-directs three NSF funded programs: CURM (the Center of Undergraduate Research in Mathematics), MAA's RUMC (Regional Undergraduate Mathematics Conferences), and PIC Math (Preparation for Industrial Careers in the Mathematical Sciences). He is a member of the MAA, AMS, SIAM, CUR, AAAS, and Project NExT, and has served in many positions including governor of the MAA Intermountain section, member of the Executive Board of CUR, and member of the editorial boards of the American Math Monthly, Math Horizons, and Involve. He was a Fulbright Scholar in Poland, a Fellow of the AMS, and received a Deborah and Franklin Tepper Haimo Award from the MAA. He is married with 5 daughters.



Phil Blau

“Ideal Prime Factors to Ideals: A Glimpse of a Structural View of Algebra”

The failure of unique factorization in some domains of complex numbers led Kummer to develop the notion of an ideal prime factor in 1846. With Kummer's work as a point of departure, Dedekind developed his theory of ideals, publishing four ver-

sions between 1871 and 1894. Meanwhile, Kronecker expanded on Kummer's work through his theory of divisors, first published in 1881 but worked out more than 20 years earlier. This talk will include biographical facts about these three mathematicians. We will also look at the role their work in the evolution of the idea of an algebraic structure. This structural image of algebra can first clearly be discerned in the 1930 classic text *Moderne Algebra* by van der Waerden.

Phil Blau received his Mathematics Ph.D. from the University of Massachusetts in the area of ring theory. After 4 years teaching at Boston University's College of General Studies, he has been at Shawnee State University, where he is currently a Professor of Mathematical Sciences and the Director of the General Education Program. Currently President of the Section, his service to the MAA Ohio Section includes membership on the Program Committee, CONTEAL, and CONSACT (including a year as chair), as well as the local arrangements for the 2007 Spring Meeting. Prior to this involvement with the Ohio Section, he co-chaired the program committee for a meeting of the Northeastern Section. His current interests include studying original source material in mathematics, so he is grateful to be a member of the ORESME reading group.

Centennial is Coming!

Chuck Groetsch

“A Couple of Integrals, a French Friar, and a Wacky Experiment”

This talk is for calculus students and their instructors. It is partly homage to a remarkable, yet under-appreciated, seventeenth century scholar, but mostly it is an illustration of the power of calculus to model physical processes and validate experimental observations. Prior to Newton's mathematization of motion, symmetry was often assumed as a matter of course in natural motions. But some bold (some would say 'wacky') experiments conducted early in the seventeenth century suggested a surprising temporal asymmetry in a simple violent motion. We tell this story and 'do the math' to shed light on this centuries old experiment.

Chuck Groetsch, a New Orleans native, is the founding dean of the School of Science and Mathematics at The Citadel, where he currently is Citadel Distinguished Professor of Mathematical Science. During a long career at the University of Cincinnati he served as dean of the McMicken College of Arts and Sciences, and head of the Department of Mathematical Sciences. Groetsch is the author of nine books, some of which have been translated into Japanese and Chinese, and numerous research papers. He serves on the editorial boards of several journals, including a stint as book review co-editor, with his

colleague Ken Meyer, of *SIAM Review*. He has held visiting appointments at universities in the US, England, Germany, Switzerland, and Australia. The MAA recognized him with the *George Pólya Award* for expository excellence in 1994, and the editors and authors of the *Journal of Integral Equations and*



Applications dedicated two special issues to Groetsch in 2010 citing his “many contributions to the world of mathematics” and his “fundamental contributions to the field of inverse problems.” He was inducted a Fellow of the American Association for the Advancement of Science in 2011 in recognition of his “distinguished contributions of the application of mathematics to science, particularly in the areas of inverse or ill-posed problems, approximation theory, and mathematical modeling” (AAAS Citation). Chuck enjoys nothing better than blending mathematics, science and history in his teaching.



Emmanuel Tsimi - Panelist

Emmanuel Tsimi received a Diploma in Civil Engineering from the Polytechnic School of the Aristotle University of Thessaloniki, Greece, in 1969. In 1971, he received his Master's Degree in Applied Mathematics from the State University of New York at Stony Brook. In 1972, he received a Master's Degree in Geodesic Science from The Ohio State University at Columbus, Ohio. His Ph.D. came in 1977 in Applied Mathematics from the State University of New York at Stony Brook.

From 1977 - 1981, he was an Assistant Professor of Mathematics at Wayne State University in Detroit, Michigan. During 1982 and 1983, he served in the Greek Army and taught in the School for Technical

Lyceum Teachers.

Between 1983 and 1998, Dr. Tsimi worked on General Motor's in-house CAD system, serving as technical leader in the design and implementation of many CAD operations. In 1984, he developed the first industrial automatic approximation of a general parametric surface by NURBS and Piecewise Polynomial representation for data exchange purposes. Those algorithms are still in use. Other CAD operations were intersection of surfaces, various projections of a curve on a surface, tracing of geodesics, curvature lines, and isoclines on a surface, computation of the minimum/maximum distance between geometric entities, and the implementation of a feature-based general design method, patented by GM Research Labs.

Dr. Tsimi worked for the Unigraphics CAD System from 1999 to 2009, particularly in the development of tools used in the manufacturing processes of Die Engineering and Die Design. Challenging problems here were: (a) the generation of a variational sweep surface, tangent to two surfaces along given curves, with

(Continued on page 17)

Spring Meeting Program

Events will take place in the Memorial Field House at University of Toledo.

Friday, April 4		
12:00-4:00	Registration	East Lobby
12:00-1:20	Student Team Competition	
12:00-1:00	Committee Meetings:	
	Centennial Committee	FH 2620
	CONCUR (Curriculum)	FH 2640
	CONSACT (Section Activities)	FH 2660
	CONTEAL (Teacher Education & Licensure)	FH 2680
1:00-4:00	Vendor & Book Exhibits	Atrium
1:30-1:45	Welcome and Announcements Lloyd Jacobs, Karen Bjorkman	FH 2100
1:45-2:45	Invited Address: "How Math is Changing the World" Michael Dorff	FH 2100
2:45-3:10	Break	Atrium
3:10-3:15	Centennial Minute	FH 2100
3:15-4:15	Invited Addresses: 2 25-minute presentations "Vehicle Impact Test Form Based on a Modified Super-Ellipse" Steve Goldner "Protected Mobility Optimization for the Army Ground Fleet" David A. Lamb	FH 2100
4:25-6:20	Contributed Paper Sessions	FH 2200 - 2260
4:25-6:20	Executive Committee Meeting	FH 2430
6:30-6:50	Social Time	Libbey Hall
6:30-8:00	Student Pizza Party	FH 2100
6:50-8:00	Banquet	Libbey Hall
8:15-9:15	After dinner panel: "A Mathematics Education, Today's Industrial Opportunities" Steve Goldner, Charles Groetsch, David Lamb, Emmanuel Tsimi	FH 2100
9:15	Business Meeting, Teaching Award Presentation	FH 2100

Saturday, April 5		
8:00-10:00	Registration	East Lobby
8:00-10:00	Book Vendors and Exhibits	Atrium
8:00-8:50	Coffee and Pastries	Atrium
8:05-8:40	Committee on Local Arrangements	FH 2620
8:05-8:40	Meeting of Department Chairs and Liaisons	FH 2640
8:50-9:00	Welcome and Announcements Paul Hewitt	FH 2100
9:00-10:00	Invited Address: "A Couple of Integrals, a French Friar, and a Wacky Experiment" Charles Groetsch	FH 2100
10:00-10:20	Break	Atrium
10:25-11:40	Contributed Paper Sessions	FH 220 - 2260
11:50-12:50	Retiring President's Address: "Ideal Prime Factors to Ideals: A Glimpse of a Structural View of Algebra" Phil Blau	FH 2100
12:50-1:00	Closing Remarks	FH 2100

Event locations are subject to change. Check the official program you receive when you register for the meeting in the East Lobby. Also, check the Section web page, www.maa.org/Ohio, for program updates, online registration, and contributed paper submissions.

There is a poster for the meeting that you may want to print and display in your department or other strategic areas. It is available in both Word and pdf format. Meeting Poster ([Word](#), [PDF](#)) Many thanks to Jim Anderson at University of Toledo for taking care of the local arrangements and putting together this poster.

Hotel Information

There are 11 hotels with varying prices, distances from campus, and eating possibilities listed at the local arrangements website, <http://math.utoledo.edu/~janders/MAA-SIAMMeeting/>. Those which are more removed from campus also have suggestions for best route. All the rates **except for Hampton Inn Toledo and Holiday Inn Express** are the University of Toledo rate for that hotel. **You will need to mention the University of Toledo rate when you make your reservation.** The rates do not include the room tax. The room tax rate for Lucas County is 7%. Then there could be a city room tax. So, the room tax could range from 7% to 13%.

Please make your reservation as soon as possible because there is a [Weak Signals R/C Model Expo](#) being held at the [Seagate Center](#) in downtown Toledo on April 4 - 6. The Park Inn is already sold out of rooms.

DRIVING INFORMATION

(Parking Information is on page 13)

From the Ohio Turnpike (Exit 64):

- Follow I-75 north to I-475 (Exit 204).
- Travel west on I-475 to the fourth exit, Secor Road (Exit 17).
- Turn left onto Secor Road.
- Proceed south on Secor Road to West Bancroft Street.
- Turn left onto West Bancroft Street.
- To park in [Area 13](#) or [Area 14](#), proceed east on West Bancroft Street to the first traffic light. At this traffic light, turn right onto Campus Road.
- To park in [Area 1](#), [Area 2](#), [Area 5-6](#), [Area 10](#) or [Area 11](#), proceed east on West Bancroft Street to the third traffic light. At this traffic light, turn right onto North Towerview Boulevard.

[From the Ohio Turnpike \(Exit 59\):](#)

- Follow U.S. 20 (S. Reynolds Road) north to West Bancroft Street.
- Turn right onto West Bancroft Street.
- Proceed east on West Bancroft Street past Secor Road.
- To park in [Area 13](#) or [Area 14](#), after crossing over Secor Road, proceed to the first traffic light. At this traffic light, turn right onto Campus Road.
- To park in [Area 1](#), [Area 2](#), [Area 5-6](#), [Area 10](#) or [Area 11](#), after crossing over Secor Road, proceed to the third traffic light. At this traffic light, turn right onto North Towerview Boulevard.

Via I-75 from the North:

- Continue south on I-75 to I-475 (Exit 204).
- Travel west on I-475 to the fourth exit, Secor Road (Exit 17).
- Turn left onto Secor Road.
- Proceed south on Secor Road to West Bancroft Street.
- Turn left onto West Bancroft Street.
- To park in [Area 13](#) or [Area 14](#), proceed east on West

Bancroft Street to the first traffic light. At this traffic light, turn right onto Campus Road.

- To park in [Area 1](#), [Area 2](#), [Area 5-6](#), [Area 10](#) or [Area 11](#), proceed east on West Bancroft Street to the third traffic light. At this traffic light, turn right onto North Towerview Boulevard.

Via I-75 from the South:

- Continue northbound on I-75 past downtown Toledo to I-475 west (Exit 204, Ann Arbor/Sylvania)

Note: Do not take the first I-475 US 23 North exit near Perrysburg.

- Travel west on I-475 to the fourth exit, Secor Road (Exit 17).
- Turn left onto Secor Road.
- Proceed south on Secor Road to West Bancroft Street.
- Turn left onto West Bancroft Street.
- To park in [Area 13](#) or [Area 14](#), proceed east on West Bancroft Street to the first traffic light. At this traffic light, turn right onto Campus Road.
- To park in [Area 1](#), [Area 2](#), [Area 5-6](#), [Area 10](#) or [Area 11](#), proceed east on West Bancroft Street to the third traffic light. At this traffic light, turn right onto North Towerview Boulevard.

Via US 23 from the North:

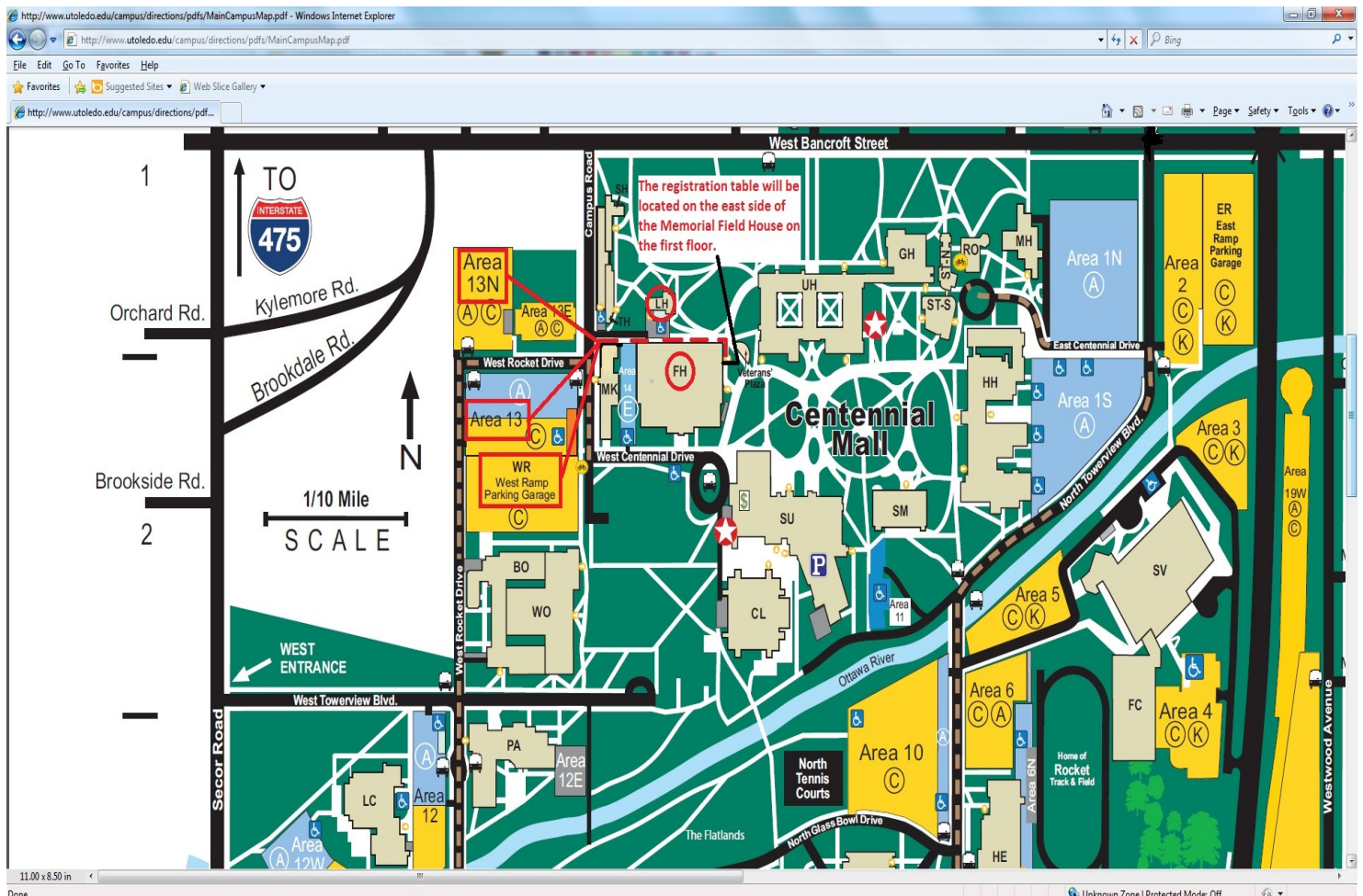
- Continue south on U.S. 23 to I-475 east (Exit 14, bear left).
- Follow I-475 east to the second exit, Secor Road (Exit 17).
- Turn right onto Secor Road.
- Proceed south on Secor Road to West Bancroft Street.
- Turn left onto West Bancroft Street.
- To park in [Area 13](#) or [Area 14](#), proceed east on West Bancroft Street to the first traffic light. At this traffic light, turn right onto Campus Road.
- To park in [Area 1](#), [Area 2](#), [Area 5-6](#), [Area 10](#) or [Area 11](#), proceed east on West Bancroft Street to the third traffic light. At this traffic light, turn right onto North Towerview Boulevard.

Parking Information

In order to park on campus, you will need to [register your car](#). You will need to register your car for the day(s) that you are planning to attend the meeting. There will be a \$3.00 charge for parking on each weekday. However, there will not be a charge for parking on the weekend. **On a weekday, you must park in any space marked by white lines. These parking spaces are available in any parking area with signage displaying Permit C parking.** On the weekend, you can park in any space marked by white lines or yellow lines. If you have a handicapped permit, you will need to indicate this when you register your car. You can park in any marked handicapped space.

NOTE: There are some handicapped parking spaces available in most of the parking lots listed below.

Parking Lot	Location
Area 14	Northwest side of the Memorial Field House off West Centennial Drive. West Centennial Drive is off Campus Road and Campus Road is off Bancroft. Handicapped parking only.
Area 11	Northeast side of campus off North Towerview Boulevard and North Towerview Boulevard is off Bancroft. Handicapped parking only.
Area 1	Northeast side of campus off North Towerview Boulevard and North Towerview Boulevard is off Bancroft. Handicapped parking only.
Area 13	Northwest side of campus off Campus Road and Campus Road is off Bancroft. This parking area provides the best access to the Memorial Field House and Libbey Hall. Area 13E is currently closed. I will update the map if this changes.
Area 2	Northeast side of campus off North Towerview Boulevard and North Towerview Boulevard is off Bancroft.
Area 5 and 6	Northeast side of campus off Stadium Drive. Stadium Drive is off North Towerview Boulevard and North Towerview Boulevard is off Bancroft.
Area 10	Northeast side of campus off Stadium Drive. Stadium Drive is off North Towerview Boulevard and North Towerview Boulevard is off Bancroft.



Notes from Ohio NExT

Ohio NExT (New Experiences in Teaching) is a program for new faculty members. Its goal is to help newer faculty to network with colleagues, to share ideas and experiences that promote professional growth, and to encourage faculty to become involved in the Ohio Section.

On Thursday evening, April 3rd, the night preceding the Ohio Section Spring Meeting, members of Ohio NExT will gather for a banquet beginning at 7:00 p.m. at Eddie Lee's Casual Dining (4700 Nantuckett Dr, http://www.letseat.at/Eddie_Lees). This is a great opportunity to meet old friends and make new ones. After the banquet, the NExTers will spend approximately an hour discussing a topic related to the profession.

Then, on Friday morning, April 4th, the Ohio NExT program will continue in the Board of Trustees Conference Room in University Hall (UH) 3300 on the University of Toledo campus. The menu will consist of scrambled eggs, sausage, bacon, skin-on potato chunks, English muffins, assorted jellies, coffee, and orange juice. The workshop will then start at 8:30. The program will feature two workshops, as well as contributed talks by Ohio NExTers. We are happy to announce that

Chuck Groetsch of The Citadel will present a workshop entitled "Downside Up, Outside In: Let's Encourage Inverse Thinking" and Michael Dorff of Brigham Young University will lead a workshop entitled "Recruiting Students to Take More Mathematics Courses and to Be Math Majors." At last fall's meeting, the NExT workshop at Cleveland State University featured Christopher Swanson of Ashland University and Laurie Dunlap of the University of Akron for the fifty-minute workshops. Lola Thompson of Oberlin College and David Gerberry of Xavier University presented the 15-minute talks.

Ohio NExT is open to anyone in the Ohio Section who is in his/her first five years of teaching in Ohio. If this applies to you, please consider joining us this spring for our NExT Banquet and Workshop, as well as the Ohio Section Meeting that follows. Contact Chris Swanson (cswanson@ashland.edu) for membership information and details.

Ohio NExT is coordinated by Katie Cerrone, University of Akron (kc24@uakron.edu); Chris Swanson, Ashland University (cswanson@ashland.edu); and John Tynan, Marietta College (tynanj@marietta.edu).

Campus Notes

At **Ashland University**, **Cathy Stoffer**, who retired at the end of last academic year, was awarded professor emeritus status. After 30 years of teaching at Ashland University, **Tom Dence** has retired.

From **Sinclair Community College**, **Bob Chaney** won the 2013 US Professor of the Year (in the Outstanding Community Colleges Professor category), sponsored by The Council for Advancement and Support of Education and the Carnegie Foundation for the Advancement of Teaching.

Aparna Higgins, at **University of Dayton**, was honored with the MAA Certificate for Meritorious Service at the 2014 Joint Mathematics Meetings in Baltimore. Aparna was nominated for this honor by the Ohio Section of the MAA. Look for Aparna's citation, biography and response on page 7 of this issue. All of the citations and recipients' responses can be found in the Prize Booklet (<http://www.maa.org/sites/default/files/pdf/awards/jmm14PB.pdf>).

The University of Findlay welcomes two new faculty **Dr. Aaron Blodgett** and **Dr. Michael Crumley**. They

both started in Fall '12 and come to us from Central Michigan University and The University of Toledo, respectively. **Dr. Pam Warton** was promoted to Professor of Mathematics. **Dr. Robert Bausch** of Oberlin College will be our Math Day speaker on March 13, 2014 speaking on Math and Op Art. His talk at the last Ohio MAA Spring Meeting prompted two undergraduates to start a research project in that area! At the end of the 13/14 academic year, **Mrs. Diane Groth** will be retiring after 27 years with the university and she will be missed.

Wittenberg University was pleased to welcome a new faculty colleague this past fall. **Brian Jackson** joined the Department of Math and Computer Science as a Visiting Instructor of Computer Science. Brian will finish his Ph.D. at Wright State University this Spring, with his thesis in Computer Vision and Image Processing. On a sad note, **Eric Wilson**, Professor Emeritus of Mathematics, passed away at his retirement home in Rugby, Tennessee in April last year. Eric was a member of the mathematics faculty at Wittenberg for 34 years, retiring in 1996, and he was an active member of the Ohio Section.

Nominations for Section Officers

The election of officers will take place at the Business Meeting, Friday evening, April 4, at the University of Toledo in Toledo, Ohio. At that time, nominations for other candidates may also be taken from the floor. The President-Elect serves for one year and then becomes President for one year. The senior person on the Program Committee serves as the chair of that committee. There are two candidates this year, one to serve a two-year term that is available due to an unexpected opening, and the other to serve a traditional three-year term. The Secretary-Elect serves in the position for one year and then becomes the Secretary for a three-year term.



The Nominating Committee is pleased to nominate **Daniel E. Otero** for **President-Elect**. Danny received his PhD from Penn State University in 1987 and, after a two-year post-doctoral position at Syracuse University, joined the faculty at Xavier University, where he is currently in his 25th year. He has been active in the Ohio Section since his arrival at Xavier, having served on the Program Committee, CONCUR, and currently, the Centennial Committee. He has hosted Ohio Section meetings at Xavier in 1992, 2002, and 2012. In addition, since 2008 Danny has served as the Section

Archivist. He is well-known for speaking on topics in the history of mathematics, and with Daniel J. Curtin (Northern Kentucky University), he organizes the ORESME Reading Group, a seminar that meets twice a year in the Cincinnati area to read important historical mathematical texts.

The Committee also presents **Pam Warton** for the **Secretary-Elect** position. Pam earned her PhD in 1997 from Bowling Green State University in infinite ordered group theory under Dr. Stephen McCleary. After teaching at BGSU for 5 years, she spent the next 4 years at Siena Heights University in Michigan where she was introduced to the undergraduate research experience. She came to The University of Findlay in the fall of 2006. While her training is in theoretical mathematics, she has become fascinated with applied mathematics, and has done research with undergraduate students in everything from kaleidoscopes and knot theory to using mathematics to combat terrorism. She became chair of the Math Department in 2009, and is also the faculty advisor of the UF Euler Math Club and UF's chapter of Pi Mu Epsilon. She is also an active member of the MAA and is a current



member of CONCUR and a former member of CONSACT. She became the Secretary-Elect of the Ohio MAA Section in 2009 and has held the post of Secretary since. She has been a member of many different university committees, and is involved at all levels of the university. She also helped establish a chapter of Sigma Xi at UF and served a term of president of the chapter. She has won several teaching awards, an advisor of the year award, and was nominated by students for Who's Who of America's Teachers four separate years. She is also a charter member of the university's orchestra and has been a member of the Perrysburg Symphony Orchestra as a violinist.

For the two-year term to the **Program Committee**, the Nominating Committee is pleased to nominate **Bill Fuller** from Ohio Northern. Bill received his Ph. D. from Indiana University under Andrew Lenard. He has taught at Holy Cross College in Notre Dame, Indiana, and at the University of Portland in Portland, Oregon. In 2002 Bill moved to Ohio Northern University and has belonged to the Ohio Section since then. He has served (and is serving) on CONCUR and was its



chair from 2010 until 2013. His primary interest is in mathematical aspects of physics, but he is pursuing interests in applications of stochastic processes to communication theory, art gallery theorems, and applications of geometry to music. His dog Skipper always accompanies him to the Section meetings.

(Continued on page 17)

Student Activities in the Ohio Section

Centennial Note #9

In the early 1950s J. Sutherland Frame introduced Pi Mu Epsilon student paper sessions at the Joint Summer Mathematics Meetings, and it wasn't long before students began to speak at Ohio Section meetings.



A student assists Doug Ensley during his after-dinner address in Spring 2011.

The earliest record of a student paper occurs in April 1957, when A. J. Gruber (Kent State University) spoke on "A Serial Numbering System for Permutations." Another decade elapsed before G. J. Sherman (Bowling Green State University) and Edward Molnar (Ohio University) spoke in 1968 on "The Rim of an R-group" and "The History of Ryley's Problem," respectively. Two years later there were three student speakers on the program, followed by two more in 1971. Seven students, representing four universities, spoke in 1972. This began a tradition of student papers at the spring meetings that have often rivaled the contributed papers by faculty in quality as well as in number.

Other sections picked up the idea of student paper sessions and, by 1982, seventeen sections reported a total of 98 student speakers, with the Ohio's 22 leading the pack. Five years later the number of student papers presented at the Ohio Section spring meeting had grown to

31, and nearly half of the 216 persons registered at that meeting were students. In 2013, fifteen of the 30 contributed papers were presented by students. To promote student participation, a Committee on Student Members (CONSTUM) was formed, originally as a subcommittee of the Committee on Section Activities and then, in 1987, as a standing committee in its own right.

At one time student papers were scheduled in specially designated sessions, but today they are intermingled with the other contributed papers. For a number of years it was the practice of the Ohio Section to give awards to three students for outstanding papers. Later, each student speaker received a free MAA membership. Today, however, student speakers only get free registration, the same as other students who attend the meeting, and they are invited to partake of a pizza party, provided by the host institution.

The first annual Ohio Section Student Team Competition was held during the 2004 spring meeting at the University of Cincinnati. Seventeen teams, representing nine schools and including a total of 44 students, participated. Teams from Kenyon College captured both first



There was opportunity to relax outside at Shawnee State University in 2007.



Participants in the ninth annual Leo Schneider Student Mathematics Competition, 2012.

and third places, while second place went to Ohio Wesleyan University. Cash awards of \$120, \$60, and \$45, respectively, were awarded to those teams. Most recently, in spring 2013, 65 students, representing 12 institutions, participated as members of 22 teams. First, second, and third place cash prizes of \$150, \$120, and \$90, respectively, were awarded to the teams from Case Western Reserve University (1st and 2nd) and Denison University (3rd).

Beginning in 2011 the competition was renamed the Leo Schneider Student Mathematics Competition in honor of a past Ohio Section President and Governor who died in June 2010. Schneider had served as Ohio's regional coordinator for the American High School Mathematics Examination and chaired the national American Mathematical Competitions Committee for six years. He had a reputation as one of the country's premier problem posers. That year a record number of 70 students, forming 24 teams from 13 schools, participated in the Competition.

*By David Kullman
Miami University*

*Photos from Ohio Focus archives
Spring MiniFocus 2007, 2011, 2012*

Nominating Committee

(Continued from page 15)



The Nominating Committee presents Laurie Dunlap for the regular term on the **Program Committee**. She is an Associate Professor in the Department of Mathematics at The University of Akron, working in the department since 2006. Her main research areas are in mathematics education. She has served the Ohio Section for the past three years on CONTEAL, has presented contributed talks, and in the fall of 2013, was an invited speaker for the Ohio NExT meetings.

The Nominating Committee:
Jon Stadler (Capital University), Chair
Don Hunt (Ohio Northern University)
Mark Miller (Marietta College)

About University of Toledo

The University of Toledo is one of 14 state universities in Ohio. Established in 1872, it became a member of the state university system in 1967. The University of Toledo and the Medical University of Ohio merged in July 2006 to form the third-largest public university operating budget in the state.

The Department of Mathematics and Statistics is housed in University Hall- built in the Collegiate Gothic style and completed in 1931. 400 workers took 11 months and used 50,000 tons of limestone to complete the 63 foot tall building and its 205 foot tower.

Banquet Information

The banquet will be held in the Main Dining Room of [Libbey Hall](#). The menu consists of Garden Tossed Salad, Herb Grilled Chicken Breast, Alfredo Pasta Primavera, Rosemary Garlic Red Skin Potatoes, Green Bean Amantine, Rolls, Cake, Iced Tea, and Coffee. The cost is \$25. Due to maximum seating capacity in the Main Dining Room in Libbey Hall, only 75 banquet tickets will be available.

President's Message

(Continued from page 3)

all my involvement with the section, it has been rewarding work. If you are interested in becoming more active, then you can contact the President or a committee chair. Over the years, I have witnessed the positive impact our President-elect, John Prather, has had on the section through a wide array of service activities, so I know the Ohio Section is in great hands when I pass the gavel to John to conclude the upcoming meeting. Once again, I humbly thank the membership.

Phil Blau
Shawnee State University
President of the Ohio Section
pblau@shawnee.edu

Emmanuel Tsimi

(Continued from page 10)

curvature constraints, automatically filling in gaps and resolving overlaps. (b) the automatic reconstruction from scanned point-data of a sheet-metal panel compensated for spring-back after a stamping operation. The original surface continuity and topology of the design are kept. (c) create the kinematic surface of a straight segment sweeping along a guide curve, satisfying given constraints, and handling singular components as well as corners.

Currently he is working for Siemens PLM, doing NX Freeform modeling. A challenging problem was the creation of the developable surface connecting two given curves in 3D geometric space.

Resources for Speakers

Speakers are encouraged to check out these resources that provide tips and strategies for giving good math and science presentations:

- "Technical Speaking," funded by the NSF and hosted by Denison University, at <http://techspeaking.denison.edu/>.
- "Advice on Giving a Good Power Point Talk," *Math Horizons* article by Joe Gallian (April 2006), at www.d.umn.edu/~jgallian/goodPPTalk.pdf.

2013-2014 Ohio Section Officers and Committees

ELECTED OFFICERS

President

Phil Blau, Shawnee State University
740-351-3443; pblau@shawnee.edu

Past-President

Wiebke Diestelkamp, University of Dayton
937-229-2013; wiebke@udayton.edu

President-Elect

John Prather, Ohio University—Eastern
740-699-2498; prather@ohio.edu

Section Governor

Barbara D'Ambrosia, John Carroll Univ.
216-397-4682; bdambrosia@jcu.edu

Secretary

Pamela Warton, University of Findlay
419-434-4147; warton@findlay.edu

Treasurer

Brian Shelburne, Wittenberg University
937-327-7862; bshelburne@wittenberg.edu

OTHER OFFICERS

Department Liaisons Coordinator

Carl Spitznagel, John Carroll University
216-397-4683; spitz@jcu.edu

Webmaster

Darren Wick, Ashland University
419-289-5795; dwick@ashland.edu

On-line Registration

G. Jay Kerns, Youngstown State University
330-941-3310; gkerns@ysu.edu

Newsletter Editor

David Stuckey, Defiance College
419-783-2464; dstuckey@defiance.edu

Ohio Project NExT Co-Coordinator

Katie Cerrone Arnold, University of Akron
330-927-8809; kc24@uakron.edu
Chris Swanson, Ashland University
419-289-5264; cswanson@ashland.edu
John Tynan, Marietta College
(740) 376-4873; john.tynan@marietta.edu

OhioMATYC Liaison to OhioMAA

Jim Anderson, University of Toledo

OhioMAA Liaison to OhioMATYC

Robert Hovis, Ohio Northern University

OMSC Liaison

Katie Cerrone, University of Akron

OCTM Liaison

Sandy Schroeder, Ohio Northern University

Archivist

Daniel Otero, Xavier University
513-745-2012; otero@xavier.edu

COMMITTEES

* Denotes committee chair. Elected Officers and Committee Chairs are voting members of the Executive Committee. Terms expire at the end of the Spring meetings of the year listed. See the Bylaws.

Program Committee

*Lew Ludwig, Denison University (2014)
Matthew Menzel, Marietta College, (2016)

CONTEAL

*Richard Little, Baldwin-Wallace Coll. (2016)
John Prather, Ohio Univ Eastern (2014)
Laurie Dunlap, University of Akron (2014)
Susan Thompson, Otterbein University (2014)
Pam Warton, University of Findlay (2015)
Jenny McKinney, Shawnee State Univ (2016)
Sandy Schroeder, Ohio Northern Univ (2016)

CONSTUM

*Ryan Rahrig, Ohio Northern Univ (2016)
Matt McCullen, Otterbein University, (2014)
Elizabeth Wilmer, Oberlin College (2014)
Thomas Wakefield, Youngstown St. U. (2015)
Erica Whitaker, Otterbein University (2015)
Mohammed Zaki, Ohio Northern Univ (2016)

CONSACT

*Barbara Margolius, Cleveland State U (2015)
Justin Young, Ashland University (2014)
Eric Wingler, Youngstown State Univ. (2015)
Paige Rinker, John Carroll University (2015)

CONCUR

*Chandra Dinavahi, U. of Findlay (2016)
Anna Albert, University of Findlay (2014)
William Fuller, Ohio Northern Univ (2014)
David Cusick, Marshall University (2015)
Giorgi Shonia, Ohio Univ. Lancaster (2015)
Glen Lobo, Sinclair Comm. College (2016)

OTHER COMMITTEES

Nominating Committee

*Jon Stadler, Ashland University (2016)
Mark Miller, Marietta College (2014)
Don Hunt, Ohio Northern University (2015)

Committee on Contests

David Stenson, John Carroll Univ, AMC12

Teaching Award Committee

* Wiebke Diestelkamp, University of Dayton
(Past President)
Pam Warton, Univ. of Findlay (Secretary)
Harold Putt, Ohio Northern University
(Past recipient 2012)
David Meel, Bowling Green State University
(Past recipient 2011)

Centennial Committee

*David Kullman, Miami University
Tom Dence, Ashland University
Jon Dunlap, Terra Community College
Tom Hern, Bowling Green State University
Danny Otero, Xavier University
Al Stickney, Wittenberg University

LOCAL ARRANGEMENTS FOR MEETINGS

Spring 2014: University of Toledo
Jim Anderson, jim.anderson@utoledo.edu

Fall 2014: Wittenberg University
Brian Shelburne,
bshelburne@wittenberg.edu

Spring 2015: Marshall University
Mike Schroeder, schroederm@marshall.edu

Fall 2015: Capital University
Jon Stadler, jstadler@capital.edu

Spring 2016: Ohio Northern University
Sandy Schroeder, s-Schroeder@onu.edu

Thank You to the many people who contributed articles and information for this newsletter.

David Stuckey, Editor

Calendar

Ohio Section Meetings

Fall 2014 Section Meeting, October 31-November 1, 2014, Wittenberg University, Springfield, OH

Spring 2015 Section Meeting, Marshall University, Huntington, WV

Fall 2015 Section Meeting, Capital University, Columbus, Ohio

Spring 2016 Section Meeting, Ohio Northern University, Ada, OH

National MAA-AMS Meetings



MathFest, August 7-9, 2014, Portland, OR

Annual Joint Meetings, January 10-13, 2015, San Antonio, TX

MathFest, August 5-8, 2015, Washington, D.C.

Annual Joint Meetings, January 6-9, 2016, Seattle, WA

MathFest, August 3-6, 2016, **Columbus, OH**

Annual Joint Meetings, January 4-7, 2017, Atlanta, GA

MathFest, July 26-29, 2017, Chicago, IL

Annual Joint Meetings, January 10-13, 2018, San Diego, CA

MathFest, August 1-4, 2018, Denver, CO

Annual Joint Meetings, January 16-19, 2019, Baltimore, MD

Other Meetings: Ohio and Surrounding States

Kentucky Section MAA Section, Mar 28-29, 2014, Murray State University, Murray, KY

<http://sections.maa.org/kentucky/>

Indiana Section MAA, Apr 4-5, 2014, Indiana University -Purdue University, Ft Wayne, IN,

<http://sections.maa.org/indiana/>

Allegheny Mountain Section MAA, Apr 4-5, 2014, Westminster College, New Wilmington, PA

<http://sections.maa.org/allegheny/>

OhioMATYC Spring Meeting, Apr 11-12, 2014, Mohican Lodge and Conference Center

http://www.ohiomatyc.org/index.php?p=1_24

Michigan Section MAA, May 2-3, 2014, University of Michigan-Flint, Flint, MI

<http://www.michmaa.org/>

Miami University 42nd Annual Conference, September 19 - 20, 2014, Oxford, Ohio

OCTM Annual Meeting, Nov 5-7, 2014, Cleveland, OH

<http://www.ohioctm.org/index.html>

Central Section AMS, Mar 13-15, 2015, Michigan State University, East Lansing, MI

<http://www.ams.org/meetings/sectional/sectional.html>

Other National Meetings

NCTM National Meeting, April 9-12, 2014, New Orleans, LA

<http://www.nctm.org/neworleans/>

International Conference on Technology in Collegiate Mathematics (ICTCM), March 20-23, 2014, San Antonio, TX <http://ictcm.pearsonctc.net/>

NCTM, October 29-31, 2014, Indianapolis, IN

<http://www.nctm.org/conferences/default.aspx?id=52#2014Reg>

Joint Statistical Meetings, August 2-7, 2014, Boston, MA <http://www.amstat.org/meetings/jsm/2014/>

AMATYC Annual Conference, Nov 13-16, 2014, Nashville, TN

<http://www.amatyc.org/?page=Conferences>