MathTimes

This issue highlights

More highlights

Welcome to issue 1 of Math Times

Welcome to the inaugural issue of the Math Times! The Department of Mathematics is blessed with an excellent faculty and students, and I hope you enjoy reading about their many accomplishments in the pages that follow.

For our alumni/ae and retired faculty members, please e-mail Ms. Sally Malarney (smalarney@wcupa.edu), our Administrative Assistant, and let us know what you're up to. We'd like to highlight your accomplishments and whereabouts in future issues. Also, if you would like to attend the Mathematics Awards Ceremony, please let Ms. Malarney know. The Ceremony is scheduled for Sunday, November 4, 2018, beginning at 11:00 a.m. at Penn Oaks Country Club. Brunch will be served.

Finally, I'd like to thank the contributors to the Math Times and especially Dr. Jimmy McLaughlin for pulling this together. I sincerely hope it enables us to stay in touch.

"A topologist is someone who cannot tell the difference between a doughnut and a coffee cup."

Student News

31st Annual Awards Ceremony
September 24, 2017

The West Chester University Department of Mathematics 31st Annual Awards Ceremony was held on September 24, 2017, at the Penn Oaks Golf Club, 150 Penn Oaks Drive, West Chester. The program commenced with a social hour from 11:00 a.m. – 12:00 p.m, with the brunch and awards ceremony being from 12:00 p.m. to 2:00 p.m.

 More information about the scholarships awarded may be found on the department's scholarships page.

The photographs below are of the students receiving their awards. More pictures from the awards ceremony may be found in the slideshowuploaded to the department's youtube channel.

A list of scholarships awarded, and pictures of the awardees, may be found here.


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2018 Integration Bee

The Department of Mathematics 2018 Integration Bee was held on April 11, 2018.

This event event was organized by Dr. Mike Fisher, with the assistance of Dr. Andreas Aristotelous, Dr. Jeremy Brazas, Dr. Andrew Crossett, Dr. Peter Glidden, Dr. Allison Kolpas, Dr. Chuan Li, Dr. James Mc Laughlin, Scott Parsell, Dr. Rosemary Sullivan, and Dr. Peter Zimmer.

Pizza was provided by the Mathematics Department, and a fun time was had by all.

Pictures were taken by Professors Andreas Aristotelous, Mike Fisher and Scott Parsell.
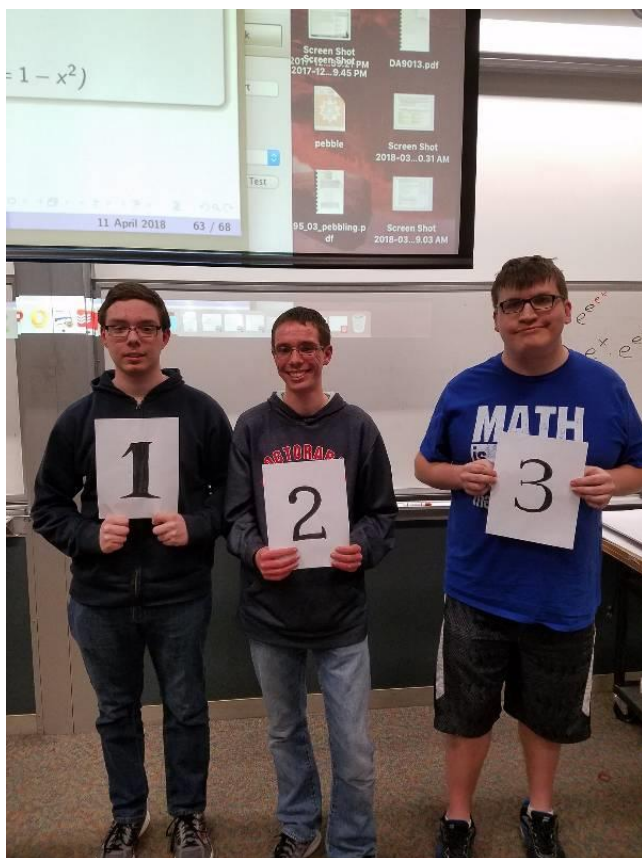
The 2018 integration bee - Sean Hazen was first, Keith Hazen was second, and Sean Bastian was third.
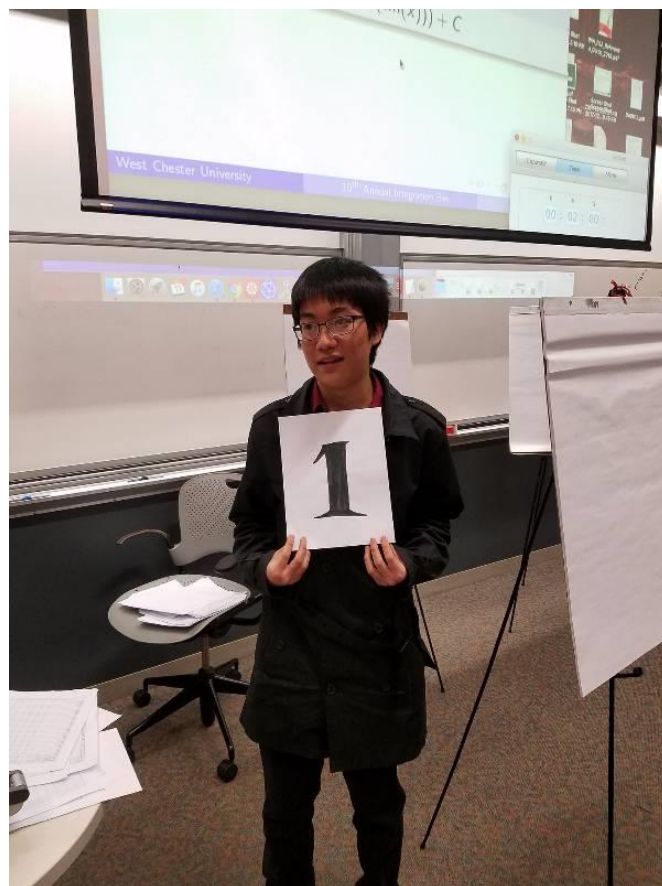
For the first time, the Department invited BC Calculus students from Downingtown, West Chester, and Unionville – Chadds Ford to participate.

We are pleased to announce that Mr. Noriyuki Shinagawa from Downingtown STEM took home the first place prize, a $150 gift card.

Spring 2018 Pi Mu Epsilon Induction

The Spring 2018 Pi Mu Epsilon induction ceremony was held on 5th April in the Mathematics Department.

The complete list of Spring 2018 Pi Mu Epsilon Inductees: Ethan M. Braglio, Angela F. Bussanich, Robert J. Clark, Patrick G. Corrigan, Gretchen E. Curry, Brandon M. Edwards, Andrew Fleming, Abigail E. Foster, Albert J. Haynes, Josiah D. Keller, R. Hunter Langel, Stacy A. Porten-Willson, Kelly M. Schmoock, Jonathan I Thurston.

Here is a link to a video collage of the induction ceremony.

Here is the program from the ceremony.

Student Research

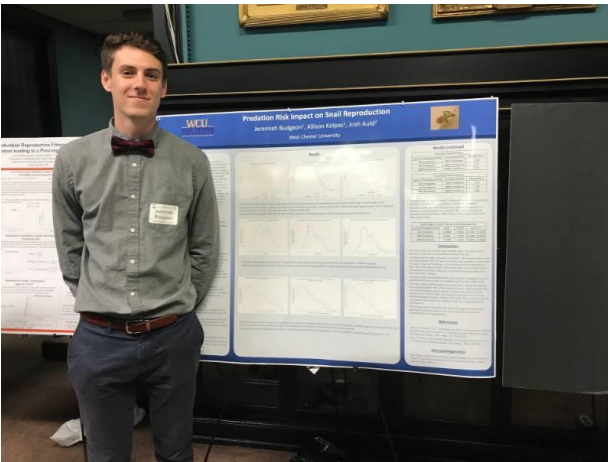Two students of Dr. Allison Kolpas, graduate student Lane D'Alessandro and undergraduate student Jeremy Budgeon , presented posters at the Evolution in Philadelphia Conference (EPiC) on Saturday, September 8th at the Academy of Natural Sciences in Philadelphia.
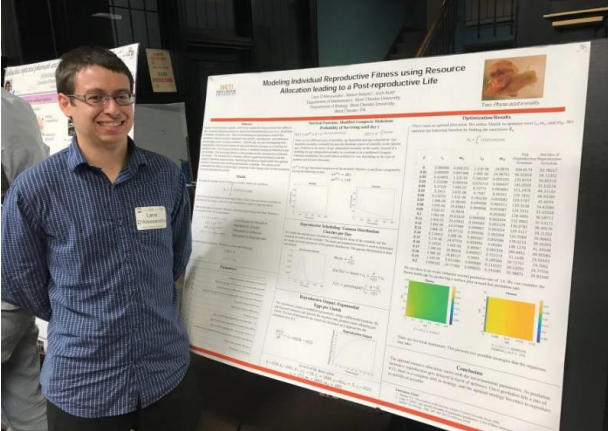
Lane D'Alessandro presenting his poster at the Evolution in Philadelphia Conference (EPiC) on Saturday, September 8th 2018.

Here is the poster from Lane's presentation.

Lane is a graduate student in the M.S. in Applied and Computational Mathematics program. He is conducting research with Dr. Allison Kolpas.

Jeremy Budgeon presenting his poster at the Evolution in Philadelphia Conference (EPiC) on Saturday, September 8th 2018

Here is the poster from Jeremy's presentation.

Jeremy is an undergraduate student in the Applied and Computational Mathematics BS track, with minors in Statistics and Computer Science. He is conducting research with Dr. Allison Kolpas.

Benjamin Plumridge, a graduate student working with Dr. Andreas Aristotelous, won 3rd prize at the Spring 2018 CSM Poster Session held on April 27 2018. Here is Ben's poster.

Ben also won first prize at the All Science Research Poster Session held on December 8th, 2017.

Ben also gave a talk in the Applied mathematics seminar on April 12 2017.

His talk was entitled *Developing a Computational Model of Dorsal Closure*. Here is the abstract and the presentation .

Applied Mathematics Seminar 📊
January 31st, West Chester University

Xiaojuan (Cathy) Yu is a graduate student working on (unrelated) projects with Dr. Allison Kolpas and Dr. Chuan Li.

The seminar talk she gave is on research she conducted while holding an internship at Stroud Water Research Center.

Click here to download the pdf file of her presentation.

Research in Mathematics and Sciences (RIMS) Award

Dr. Chuan Li has received a Research in Mathematics and the Sciences (RIMS) Award from West Chester University's College of the Sciences and Mathematics. This award is for his project *Development of a new Matched Alternate Direction Implicit (ADI) method for solving parabolic interface problems*.

Two undergraduate students, Cameron Campbell and Stacy Porten-Willson, will be supported by this grant for their research activities in this project in 2017-2018.
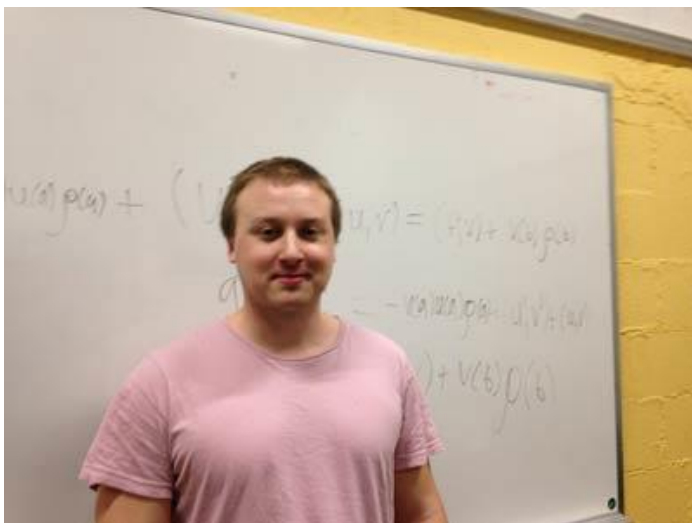
23rd Industrial Mathematical and Statistical Modeling Workshop for Graduate Students

July 16-26, 2017, SAS Hall on the campus of North Carolina State University

Benjamin Plumridge, a graduate student working with Dr. Andreas Aristotelous, has been accepted to the Industrial Math/Stat Modeling Workshop for Graduate Students – July 16-26, 2017.

This is a prestigious and selective program (information about last year's workshop), with only 30-40 graduate students from the USA (sometimes from outside the USA) accepted each year, so big congratulations to Ben.

Second Annual Joint Actuarial Career Day Of Arcadia and West Chester

WCU hosted a [Math and Actuarial Science Career Fair](#) on Friday, September 21, 2018. This is the second time that this Career Day has been held, the first time being in 2017 at our partner institution, Arcadia University.

This event was organized jointly by Dr. [Lisa Marano](#), West Chester University [Mathematics Department](#), and Dr. [Irina Pogrebivsky](#) and Dr. [Ned Wolff](#) from the Department of [Computer Science and Mathematics](#) at Arcadia University.

Twenty-five students from our Actuary and other Mathematics programs and the Applied Statistics graduate program participated in formal and informal interviews throughout the day.

Participating companies included CBIZ, Lincoln Financial Group, Aon Pension Group, Aon Health Group, Transamerica, Penn Mutual, IPipeline, Willis Towers Watson – Actuarial Group, and Willis Towers Watson - Pension Group.

Of note, among the interviewers were four WCU Mathematics Department alumni: Courtney McIlvaine (Biddle), Eric Rau, Michael Colon, and Kerry Freas.

Featured Faculty and Staff

Dr. Jeremy Brazas

Dr. Jeremy Brazas joined the faculty of the Mathematics Department in Fall 2017. Before that (2012 to 2017), he held the positions of Lecturer and Senior Lecturer at Georgia State University in Atlanta GA. Just prior to joining West Chester University, he received the 2017 Southeastern MAA award for distinguished teaching by a beginning faculty member.

Dr. Brazas received his PhD in 2011 from the University of New Hampshire under the advisement of Dr. Maria Basterra. The topic of this thesis was in Algebraic Topology. His research focuses on "wild" or "infinitary" algebraic topology; he studies deformations of topological spaces with arbitrarily small structures using groups with infinite products. He also has some interests in general topology and category theory. Despite being a topologist, Dr. Brazas can typically tell the difference between a coffee cup and donut.

Outside of mathematics, Dr. Brazas is an advanced practitioner of yoga and occasionally teaches an all-levels class in Center City Philadelphia. He can often be found running, biking, or enjoying a cheesesteak in Philadelphia. He watches and reads mostly sci-fi/fantasy fiction and listens to a wide variety of music including 90's alternative and 2000's indie rock.

"I'm very excited to join the Math Department here at WCU!"

Dr. Brazas grabbing a few moments between classes to practice some advanced yoga.

Mathematics Department Secretary
Ms. Sally Malarney

Sally Malarney has been the administrative assistant for the Department of Mathematics for almost two years now, and with West Chester University for over 12 years. She grew up in Kentucky and graduated from the University of Kentucky, as did her husband. Sally and her family lived in Tennessee, Georgia and North Carolina before moving to West Chester in 1999. She is very proud of her three children, two sons and one daughter (now 28, 27 and 26 respectively), who have all graduated from WCU. Some of her favorite things are spending time with her family, running, outdoor activities, reading and dogs! She has one golden retriever named Sonny, and usually another foster dog too!

Contact Information for the Mathematics Department

Follow the links for each of the following:

Department Webpage

Location of the Math. Dept. on Google Maps/directions

Visitor Parking in B lot (Reynolds Alley) or University Ave (metered)

Colloquium Schedule (all talks open to the public)

Address:
Room 101
25 University Avenue
West Chester, PA 19383

Phone: 610-436-2440
Fax: 610-738-0578

Note: "UNA" = "25 University Ave.", the location of the Math. Dept.

Dr. Andreas Aristotelous was awarded a prestigious research grant from the National Science Foundation (NSF) Division of Mathematical Sciences (DMS).

The title of the project for which Dr. Andreas Aristotelous was awarded the grant is "Computational Methods for Heterogeneous Soft Living Materials".

This grant (award number: DMS 1720226), was awarded under the NSF Computational Mathematics and Mathematical Biology Program, has a start date of July 1, 2017 and ends June 30, 2020.

This is a continuing grant award and progress is evaluated at the end of each year in order for funds for the following year to be released, to date the amount of $65,351.00 has been awarded which covers the first two years, the award is expected to total $100,115.00.

The NSF webpage that contains the award and the official public abstracts of the project can be accessed here.

The project is aimed to develop, theoretically analyze and implement practically novel computational algorithms for the solution of partial differential equation arise in computational fluid dynamics and material science that may involve coupling with discrete stochastic systems. The mathematical models describe viscoelastic multicomponent materials with some notable applications to be biofilm and cancerous tumors. The numerical solution (theoretical analysis of the computational methods and implementation) of the underlining systems of equations is extremely challenging and this is the main part of the project.

Dr. Andreas Aristotelous

Favorite Quote: "There is nothing impossible to him who will try" by Alexander the Great (356BC-323BC).

The award was selected from the complete pool of applicants that include all the research institutions in the country, and thus is more competitive than NSF grant awards given normally to Research Undergraduate Institutions like our University, labeled as (RUI) or (ROA), which their main purpose is to train undergraduate students.

The award of Dr. Aristotelous does not explicitly support any students since our institution does not have advanced PhD students that are required for this level of research. Nevertheless Dr. Aristotelous is actively engaging students in his research, like his master student in applied and computational mathematics Mr. Benjamin Plumridge who recently joint the PhD Program in Mathematics at the University of Tennessee, Knoxville.

 Dr. Aristotelous received his PhD in Mathematics in 2011 form the University of Tennessee, Knoxville, receiving also a minor in computational science at the PhD level. His research focus is on the development and analysis of numerical methods for the solution of partial differential equations. After his PhD, he received a postdoctoral fellowship position at the statistical and applied mathematical sciences institute (SAMSI) which is one of the NSF funded mathematical and statistical institutes in the country. His two-year appointment was joint with the Duke University Department of Mathematics. There, he did work on numerical analysis and computation related to biomedical engineering and cancer mathematical models. After the end of his appointment at SAMSI he remained one more year as a Visiting Assistant Professor at Duke University before joining the Department of Mathematics at Temple University in Philadelphia to work on mathematical models of biofilms. His appointment was for three years, but Dr. Aristotelous at the end of his first year accepted an offer from our University and joint the Mathematics Department at WCU in the Fall of 2015.

Dr. Gail Gallitano

Dr. Shiv Gupta

A second book by the authors, *Topics in Galois Theory,* will be published early in 2019.

Dr. Gail Gallitano and Dr. Shiv Gupta have published a book, Topics in Number Theory. The publisher is Kendall Hunt.

From the publisher's web page for the book:

"**Topics in Number Theory** is essentially a first course in number theory and as a prerequisite requires familiarity not much more than what is covered in any high school mathematics curriculum. This book is rich in examples. All the basic topic in elementary number theory including congruence, number theoretic functions, quadratic reciprocity, representation of certain primes in the form $x^2 + Ny^2$ using a theorem of Thue, continued fractions and Pell's equation have been presented in appropriate details and illustrated by examples. Chakrav ala 'Algorithm' for finding a solution of Pell's equation is also presented. The discussion of quadratic fields is followed by Euler's proof of Fermat's Last Theorem for exponent three. Several examples of Bachet equations having no solutions whose proofs can be provided based only on congruence arguments are discussed. The discussion of RSA cryptopgraphy is followed by an example using sufficiently large prime numbers. John Conway's doomsday algorithm for finding day of the week is presented and is graphically illustrated by several examples. This book has over one hundred problems of various level of difficulty from very elementary to challenging. Hints of solutions have been provided to most of these problems."

Gail Gallitano received her Bachelor's degree in Mathematics from Monmouth University, West Long Branch, NJ, her Master's degree in Mathematics from Fairleigh Dickenson University, Teaneck NJ, her Master's degree in Mathematics Education from Columbia University, NYC, NY, her Master's degree in Educational Administration from Columbia University, NYC, NY, a Master's degree equivalent in Computer Science from Clarkson University, Potsdam, NY and her Ed.D. in Mathematics Education from Columbia University, NYC, NY. She has taught mathematics at all levels for over 45 years. She has also worked in administrative positions mostly developing curriculum in mathematics and computing. She founded The *West Chester University Teachers Teaching with Technology In-service/Pre-service Professional Development Program* and directed it for over fifteen years. Her main area of interest is professional development and teaching with technology.

Shiv Gupta received both his Bachelor's degree and Master's degree in Mathematics from Delhi University, India. He received his PhD in Mathematics from Case Western Reserve University, Cleveland, Ohio. He has taught mathematics at various institutions in both the United States and abroad for over 50 years. In his spare-time he likes to read, do mathematics and travel extensively. He has attended many national and international mathematics conferences. He also enjoys giving colloquium talks to his colleagues and students at West Chester University.

Dr. Lisa Marano

"It's been an exciting time!"

Dr. Lisa Marano joins the Board of Directors of the Mathematical Association of America as Chair of MAA Committee on Sections. Dr. Marano begain her term on February 1, 2018, and will serve in this capacity until 2021.

Dr. Lisa Marano joins the Board of Directors of the Mathematical Association of America as Chair of MAA Committee on Sections. Dr. Marano began her term on February 1, 2018, and will serve in this capacity until 2021. In this role, she is responsible for the oversight of this committee which ensures the 29 local Sections of the MAA are operating within the guidelines established by the association. She supports the Sections by running Section Officers meetings at national conferences twice a year. Here, she facilitates meetings which help sections scale down successful national programs for use at their local meetings as well as provide a venue for local sections to further develop their programs for use nationally or at other sections. In addition, she works closely with leadership and staff at the MAA national headquarters in Washington, D.C. to develop programming and support for Sections.

Dr. Marano's work with the MAA began when she first graduated from Lehigh University when she was selected to be a Project NExT fellow - a professional development program for new or recent Ph.D.s in the mathematical sciences. Drs. Sullivan and Fisher are also NExT fellows! After, she served on the board of the Eastern Pennsylvania and Delaware Section of the MAA in many capacities: Section NExT chair, Vice-President, President (Chair), and Governor, among others. She has served on national committees of the MAA too – The Committee on Student Activities and Chapters and the Committee for the Participation of Minorites. In this new role on the Board of Directors, she attends board meetings regularly in Washington, D.C. and was invited to a Black Tie event in D.C. honoring the U.S. Mathematical Olympiad Team who came in first place at the International Mathematical Olympiad this summer. It's been an exciting time!

Dr. Mark McKibben

> "…he endeavors to find deeper mathematical truths central to using differential and stochastic equations to model reality. "

Dr. Mark McKibben is the 2018 recipient of West Chester University's Distinguished Sponsored Research Award.

The Distinguished Research Award is presented to full-time faculty members for their outstanding achievements in creative, research or scholarly activities, either for a specific project or a body of work accumulated over multiple years.

Dr. McKibben has been working in the areas of applied functional analysis and stochastic analysis for nearly 20 years. At the forefront of his research is the search for abstract models that connect the study of phenomena across disciplines. You can say he endeavors to find deeper mathematical truths central to using differential and stochastic equations to model reality.

He has spent a large part of his career authoring books on differential equations, functional analysis and stochastic analysis with the intent of guiding newcomers to the field at all levels on a journey toward understanding the theoretical underpinnings of evolution equations. He has written 4 books on the subject so far and has plans for a fifth after a bit of rest.

In his spare time, he is an active Cross-Fitter and a novice Olympic Weightlifter. Below is an action shot.

Dr. James Mc Laughlin

Favourite quotation:

Time disappeared, and the days passed as if in a dream"

Dr. James Mc Laughlin has published a book, Topics and Methods in q-Series.

From the publisher's web page for the book:

"The book provides a comprehensive introduction to the many aspects of the subject of basic hypergeometric series. The book essentially assumes no prior knowledge but eventually provides a comprehensive introduction to many important topics. After developing a treatment of historically important topics such as the q-binomial theorem, Heine's transformation, the Jacobi triple product identity, Ramanujan's 1-psi-1 summation formula, Bailey's 6-psi-6 summation formula and the Rogers-Fine identity, the book goes on to delve more deeply into important topics such as Bailey- and WP-Bailey pairs and chains, q-continued fractions, and mock theta functions. There are also chapters on other topics such as Lambert series and combinatorial proofs of basic hypergeometric identities.

The book could serve as a textbook for the subject at the graduate level and as a textbook for a topic course at the undergraduate level (earlier chapters). It could also serve as a reference work for researchers in the area."

Dr. Mc Laughlin joined the Mathematics Department in Fall 2005. Before that he held a visiting position at Trinity College, Hartford Ct., from 2002 to 2005.

He received his PhD in 2002 from the University of Illinois at Champaign-Urbana. His thesis adviser was Dr. Douglas Bowman (who incidentally is younger than Dr. Mc Laughlin), and the topic of his thesis was in the area of continued fractions.

Dr. Mc Laughlin's current research interests still include continued fractions, but also included basic hypergeometric series (q-series) and related areas such as integer partitions. He is a coorganizer of a special session in continued fractions at the upcoming Joint Mathematics Meeting in Baltimore in January 2019.

His favourite classes to teach are "Introduction to Cryptography" and "Computer Algebra". Both of these courses make use of a computer algebra system such as Mathematica, and assist students to go a little deeper into various areas of mathematics than they might otherwise be able to do.

Outside the classroom his favourite leisure activities are indeed leisurely – listening to music (mostly bands from the late sixties/early seventies like Pink Floyd, The Doors, Deep Purple, …), watching television (mostly mystery, suspense, horror and sci-fi/fantasy) and reading (again mostly mystery, suspense, horror and sci-fi/fantasy).

His favourite quotation may not actually be a real quotation (it does not turn up in a Google search), and may be something he misremembers someone saying in the 1969 film "More" (which he watched sometime in the early seventies, because the soundtrack was by Pink Floyd) :

– "Time disappeared, and the days passed as if in a dream".

Professor. Laura Pyott

""I could prove God statistically. Take the human body alone - the chances that all of the functions of an individual would just happen is a statistical monstrosity." – George Gallup

Professor Laura Pyott has been awarded a development grant of $2000 from The Committee for Excellence in Learning and Teaching (CELT) to fund her project "Taking the Political Pulse of WCU Students."

The project is part of an independent study on statistical methods for political polling. Three students are participating in the independent study, which includes a 2018 election poll to be given in October to a random sample of WCU undergraduate students. The independent study team is learning about survey design, survey question writing, probability samples, categorical data analysis, and weighting techniques using both SPSS and r. The team has received guidance from Dr. Terry Madonna and Professor Berwood Yost at the Center for Opinion Research at Franklin and Marshall College. The results of the poll will be presented by the students at WCU Research Day in November, and will also be shared with local media. The grant money will be used as incentive for survey recipients to complete the survey. Every student who completes the survey will receive a drink from the new WCU-run Saxby's.

Professor Pyott started in the math department as an adjunct in 2002. In the fall of 2017, her position was converted to tenure-track. Prior to teaching, she was a biostatistician in the pharmaceutical industry. She teaches Intro to Stat II, Applied Statistics (linear regression), and Experimental Design. Outside of the classroom, she enjoys cycling and open water swimming. Additionally, she is an assistant coach for the women's basketball team at division III Haverford College.

Upcoming Colloquia

KEITH WEBER
Rutgers, The State University of New Jersey

"**What Do Students Pay Attention to in Lectures in Advanced Mathematics?**"

Wednesday, October 3, 2018 from 3:20 to 4:15PM
UNA 127

The goal of this presentation is to account for the following common phenomenon: Students often walk away from mathematics lectures without understanding the main points their professor was trying to convey, even when the professor worked hard to convey these points clearly and explicitly. What I document is students focus their attention on the formal mathematics written on the blackboard and the logical correctness of the proofs they observe. They tend to ignore the conceptual meaning of the concepts covered and the reasoning used to produce these proofs, even though professors cite these as the most important part of their lectures and frequently stress these ideas repeatedly in their lectures. The implication of these findings is that the key to improving student comprehension in advanced mathematics does not only involve giving lectures that are more comprehensible, motivating and insightful. Instead, it also involves helping students understand what advanced mathematics is about and what exactly professors are trying to accomplish in their lectures.

Keith Weber is a professor of mathematics education at Rutgers University. His research focuses on the cognition used in doing and teaching advanced mathematics, with an emphasis on how students read and understand mathematical proofs. Dr. Weber has been awarded the 2004 AERA Early Career Publication Award in mathematics education, an NSF Early Career Award in 2007, the MAA Selden Prize for outstanding research in undergraduate mathematics education in 2010, the Janet Duffin Award for outstanding paper in Research in Mathematics Education in 2012, and the Best Paper Award at the annual Conference for Research in Undergraduate Mathematics Education in 2009, 2010, 2014, and 2017. Much of Dr. Weber's research can be found at: pcrg.gse.rutgers.edu/

JOHN STILLWELL
University of San Francisco
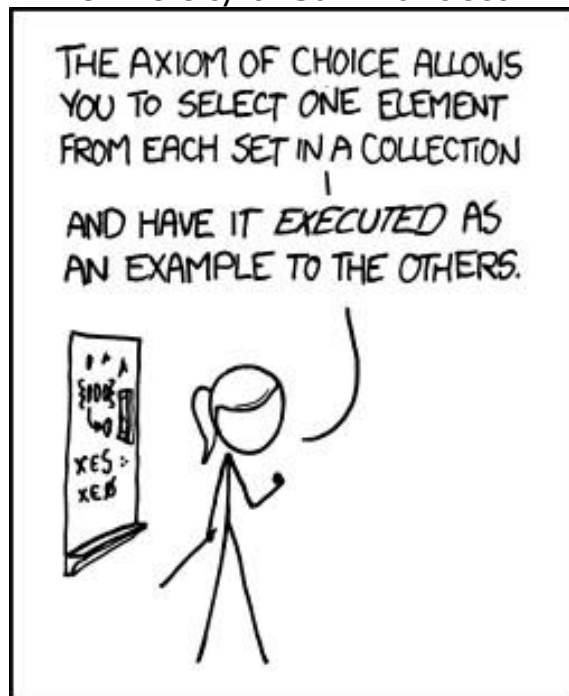
"Two Algebraic Theorems of Significance Beyond Algebra"

Wednesday, October 17, 2018 from 3:20 to 4:15PM
UNA 125

The theorems that every vector space has a basis and every nonzero ring has a maximal ideal are known to most mathematicians with a smattering of abstract algebra. It may also be known that Zorn's lemma (and hence the axiom of choice) is involved in their proofs.

However, it is not so well-known that each of these theorems is actually equivalent to the axiom of choice, so they are essentially axioms of set theory.

In this talk we will review the history of these discoveries, and also more recent work on countable vector spaces and rings, where the axiom of choice is not involved but the corresponding theorems are again equivalent to a fundamental principle about infinite sets.

John Stillwell is an Australian-born mathematician who has taught at the University of San Francisco since 2002. This will be his second visit to West Chester. He is best known for his many books such as Mathematics and Its History (3rd edition, Springer 2010), Elements of Mathematics (Princeton 2016) and Reverse Mathematics (Princeton 2018).

JAMES TANTON
Mathematical Association of America
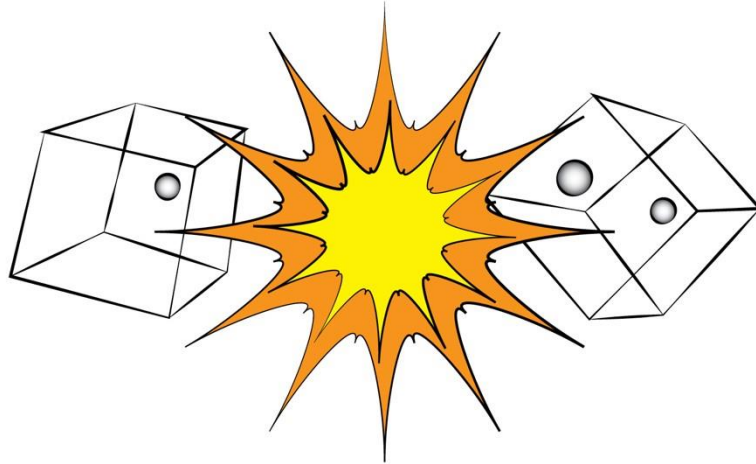
"**Exploding Dots: A Global Mathematics Phenomenon**"

Wednesday, November 7, 2018 from 5:00 to 6:00PM
BPC 101

October 10, 2017 saw the start of the world's inaugural Global Math Week, with over one million students and teachers from 168 different countries and territories taking part in a common joyous uplifting piece of classroom mathematics together. And that program has since organically grown to 4.7 million students worldwide. And what is this common thrilling mathematics? It's Exploding Dots: an astounding story that unites grade school, high-school, college mathematics and open unsolved research in one astounding fell swoop!

Come see an extraordinarily simple mathematical construct pushed to the max. Experience deep creative discovery first-hand and true joyous mathematics doing. Come with pencil and paper in hand, and possibly an extra pair of socks as this session will likely knock your first pair right off!

James Tanton (PhD, Princeton 1994, mathematics) is an author, a consultant, and an ambassador for the Mathematical Association of America in Washington D.C., currently serving as their Mathematician-at-Large. He has taught mathematics both at university and high-school institutions. James is absolutely committed to promoting effective and joyful mathematics thinking, learning, and doing at all levels of the education spectrum.

James leads the MAA's Curriculum Inspirations project www.maa.org/ci, serves as chair of the Advisory Council for the National Museum of Mathematics www.momath.org, and is a founder of The Global Math Project www.theglobalmathproject.org, an initiative transform the entire world's perception of what mathematics can and should be. Classroom mathematics too can serve as a portal for human joy, wonder, and delight.

For further information e-mail dilaria@wcupa.edu **(Keith Weber's talk) or** mfisher@wcupa.edu **(the talks by John Stillwell and James Tanton).**

See also the Colloquium page for upcoming talks.

Upcoming Graduate Classes

Spring 2019

MAT 549   MAT 532
MAT 546   MTE 530
STA 511   Mat 503
MAT 556 Industrial Math Practicum II
STA 506   Math Stat II
MTE 508 Middle School Mathematics - Curriculum,
                Instruction, Assessment
MAT 575 Complex Analysis
MTE 555 Teaching Elementray School Math II

Summer I 2019

Geometry I
Geometry for Elementary School Teachers
History of Math

Summer II 2019

MAT 500 Fundamentals of Applied Math
MTE 604 Research in Math Ed
MAT 535 Topology
MAT 514 Number Theory

Fall 2019

MAT548   Industrial Math I
MAT 515   Abstract I
MAT552   Operations Research
STA 505   Math Stat I
MTE 553   Teaching Elementary School Math I
MTE 512   Teaching Math Senior HS
MAT 555   Industrial Math Practicum I

If you wish to learn more about our graduate programs or the Department of Mathematics at West Chester University, please do not hesitate to contact us.

Peter L. Glidden, Ph.D., Columbia University   UNA 101, pglidden@wcupa.edu
Professor and Chair   610-436-2440

Gail Gallitano, Ed. D., Columbia University   UNA 114, ggallitano@wcupa.edu
Professor and Coordinator of the MA Mathematics Program   610-436-2452

Mark McKibben, Ph.D., Ohio University   UNA 113, mmckibben@wcupa.edu
Associate Professor and   610-436-2148
Coordinator of the MS Applied and Computational Mathematics Program

Randall Rieger, Ph.D., University of North Carolina   UNA 116, rrieger@wcupa.edu
Professor and Coordinator of the MS Applied Statistics Program   610-436-2893

Mathematics Department Graduate Programs.

- **MAA EPaDel meeting.**
  Professors Chuan Li and Lisa Marano are local organizers for the upcoming MAA EPaDel meeting which will.be held at West Chester University on November 3, 2018. Guest speakers will include: Deanna Haunsperger (President of the MAA), Kristin Lauter (Microsoft Research), and Alex Nakahara (The Phillies – Senior Quantitative Analyst). Register here.

- **Special Session at the Joint Mathematics Meetings.**
  Dr. James Mc Laughlin is a coorganizer of a special session in continued fractions at the upcoming Joint Mathematics Meeting in Baltimore in January 2019.

Future Issues of Math Times

I would like to thank everyone who contributed to this this newsletter.

For their many helpful and useful suggestions, I would also particularly like to thank Dr. John Kerrigan and Dr. Paul Wolfson, who sent me extensive lists of suggestions. Unfortunately I was not able to include all of their ideas this time, as this first issue was a little rushed, but I will keep all of their ideas at hand when putting together future issues.

I would also like to thank Dr. Andreas Aristotelous, Dr. Shiv Gupta, Dr. Lisa Marano, Dr. Mark McKibben, Dr. Randy Rieger for contributing ideas and support.

For future issues, all of the following would be great to get:

- News about any events similar to those that you see stories about in the current issue
- Articles from current undergraduate and graduate students
- Career news about our alumni
- News about our retired professors
- Anything else that seems like it would be suitable

Dr. James Mc Laughlin,

Mathematics Department,

West Chester University,

September 2018

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