



Midwest Crossroads AGEP PRiME Speaker Series:

The Journey from Undergraduate to The Professoriate



All talks will start at 3:30 PM in Room 1142 of the Richard and Patricia Lawson Computer Science Building.



Friday, July 1, 2011

From Indiana to Indiana: A Closed Mathematical Loop

Dr. Talitha Washington is an Assistant Professor of Mathematics at the University of Evansville, a regional undergraduate institution in Indiana. She graduated from the University of Connecticut in June 2001. Her research interests concern applications of differential equations to biology and materials engineering.



Friday, July 15, 2011

Division: In an Algebra, In a Career, and In Research Mathematics

Dr. Ulrica Wilson is an Assistant Professor of Mathematics at Morehouse College. She graduated from Emory University in mathematics in June 2004. Her research interests concern non-commutative ring theory.



Friday, July 22, 2011

Why I Became a Mathematician: A Tale of Art, Heavy Metal, Eigenvalues and Bad Ass Muscle Cars

Dr. Josef Sifuentes is a research scientist at the Courant Institute for the Mathematical Sciences. He graduated from Rice University in applied mathematics in April 2010. His research interests concern numerical analysis and computational wave scattering.



Friday, July 29, 2011

Reaching Your Limit: Advice on Being Within an ϵ -Neighborhood of Your Goals (for any ϵ)

Dr. Emille Davie Lawrence is an Assistant Professor of Mathematics at the California State University in Pomona. She graduated from the University of Georgia in August 2007. Her research interests concern the intersection of topology and algebra in general, and braid groups and right-angled Artin groups in particular.



Friday, August 5, 2011

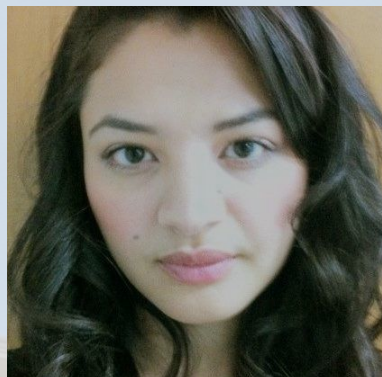
My Adventures with Elliptic Curves

Dr. Alejandra Alvarado will join Purdue next year as a Golomb Assistant Professor of Mathematics. She graduated from Arizona State University in May 2009. Her research interests concern arithmetic progressions in the coordinates of rational points elliptic curves, elliptic curve cryptography, and K-12 mathematics education.

With funding from the Midwest Crossroads Alliance for Graduate Education and the Professoriate (AGEP), Purdue University will host "AGEP PRiME: Purdue Research in Mathematics Experience," a summer program which seeks to build a community of underrepresented minorities in the mathematical sciences, focusing on undergraduate and graduate students in mathematics, statistics, and mathematics education.

Women of Color in the Mathematical Sciences

Keynote addresses will take place over networking luncheons in the Sagamore Restaurant of the Memorial Union.
Research talks will start at 3:30 PM in Room 121 of the Recitation Building.

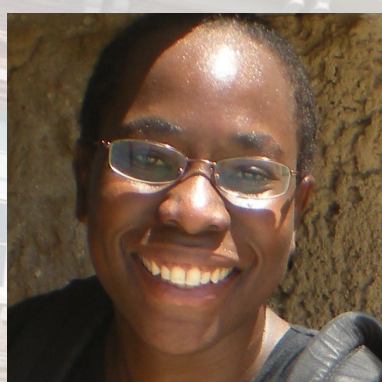


Friday, June 29, 2012

Luncheon Keynote: **Promoting Scientific Research**

Research Talk: **It's No Lie: I Study Representations of Lie Algebras**

Dr. Pamela E. Harris is a Mexican-American Mitchem Fellow Scholar in Mathematics at Marquette University, but she will be an Assistant Professor of Mathematics at the United States Military Academy at West Point in the fall. She graduated from the University of Wisconsin at Milwaukee in May 2012. Her research interests concern the representation theory of Lie algebras.

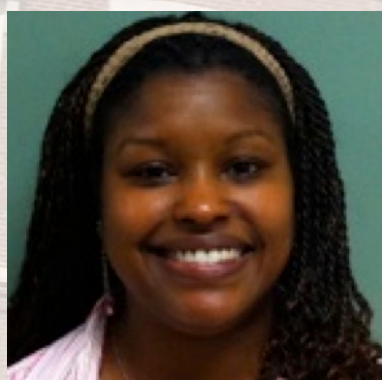


Friday, July 6, 2012

Luncheon Keynote: **There and Back Again**

Research Talk: **Curves, Sums, and Maximality**

Dr. Lois Simon is an African-American lecturer in Mathematics at Howard University. She graduated from Howard in May 2011. Her research interests concern sums of characters of finite fields.



Friday, July 13, 2012

Luncheon Keynote: **A Few Seconds Can Create a Long-Lasting Impact**

Research Talk: **C^* -Algebras Associated to Topological k -Graphs and Exel-Larsen Systems**

Dr. Paulette N. Willis is an African-American NSF Postdoctoral Fellow in Mathematics at the University of Houston. She graduated from the University of Iowa in May 2010. Her research interests concern C^* -algebras of labeled graphs and $*$ -commuting endomorphisms.



Friday, July 20, 2012

Luncheon Keynote: **Taking the Initiative in Securing Grants**

Research Talk: **Theoretical and Numerical Results on the Smallest Enclosing Ball Problem and the Smallest Intersecting Ball Problem**

Dr. Cristina Villalobos is a Mexican-American Associate Professor in the Department of Mathematics at the University of Texas-Pan American who is the Director of the Center of Excellence in STEM Education. She graduated from Rice University in May 2000. Her research interests lie in linear and nonlinear optimization as well as their applications.



Friday, July 27, 2012

Luncheon Keynote: **Tenure Times Two: How Earning Tenure Once Gave Me the Courage to Go For It Again**

Research Talk: **DCT and DDE: Using Delay-Differential Equations to Model Dendritic Cell Therapies for Cancer**

Dr. Angela Gallegos is a Mexican-American Associate Professor of Mathematics at Loyola Marymount University. She graduated from the University of California at Davis in September 2005. Her research interests concern applications of mathematics to biology and physiology.

With funding from the ADVANCE – Purdue and the Center for Faculty Success and modeled after Faculty Advancement, Success and Tenure (FAST), Purdue University will host “ADVANCE PRiME: Purdue Research in Mathematics Experience.” This summer program seeks to build a community of underrepresented minorities in the mathematical sciences, focusing on undergraduate and graduate students in mathematics, statistics, and mathematics education. For more information, contact Dr. Alejandra Alvarado at (765) 494-1423 or alvaraa@math.purdue.edu; or Dr. Edray Goins at (765) 494-1936 or egoins@math.purdue.edu.

Negotiating a Career in the Mathematical Sciences

Keynote addresses will take place over networking luncheons in the Sagamore Restaurant's Wabash Room of the Memorial Union.
Research talks will start at 3:30 PM in Room 108 of the Recitation Building.



Friday, June 14, 2013

Luncheon Keynote: **What's Your Legacy?**

Research Talk: **DNA Topology and Tangle Equations**

Dr. Candice Price is an African-American Assistant Professor of Mathematics at the United States Military Academy (West Point). She graduated in Mathematics from the University of Iowa in 2012. Her research interests include mathematical biology and the application of topology to DNA.

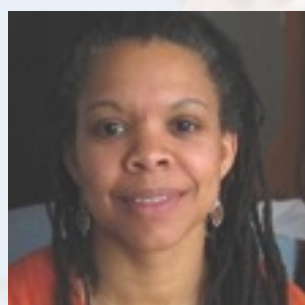


Friday, June 21, 2013

Luncheon Keynote: **Mathematics in an Interdisciplinary Research World**

Research Talk: **Sensitivity Analysis for Delay Differential Equation Models**

Dr. Danielle Robbins is an African-American Data Analyst of Research and Evaluations at the Southwest Interdisciplinary Research Center. She completed her PhD in Biomathematics at North Carolina State University in August 2011. For her current work, she provides mathematical and statistical analysis of social behavioral data to help end health disparities in minority communities.



Friday, June 28, 2013

Luncheon Keynote: **Persistence, Balance and Flexibility
in Negotiating a Career in the Mathematical Sciences**

Research Talk: **Analyzing Complex Behavior in Fluid Flows and Signals**

Dr. Sherry Scott is an Assistant Professor of Mathematics at Marquette University. She graduated in Applied Mathematics, receiving notoriety for being one of three African-American women to receive a doctorate in the mathematical sciences from the University of Maryland in 2000. Her dissertation was entitled *Spectral Analysis of Fractal Noise in Terms of Wiener's Generalized Harmonic Analysis and Wavelet Theory*.



Friday, July 5, 2013

Luncheon Keynote: **How to Find Collaborators**

Research Talk: **An Introduction to Noncommutative Invariant Theory**

Dr. Chelsea Walton is an African-American NSF Postdoctoral Fellow at the Massachusetts Institute of Technology. She graduated in Mathematics from the University of Michigan in August 2011. Her research interests concern the generalization of algebraic geometry and invariant theory to rings which are noncommutative.



Friday, July 12, 2013

Luncheon Keynote: **Career: The Whole Package (Work and Other Aspects of Life)**

Research Talk: **Representations of Quiver Algebras**

Dr. Shannon Talbott is an Assistant Professor of Mathematics of Native American descent at the College of Mount St. Joseph. She graduated in Mathematics from the University of Iowa in 2012. Her research interests concern the representation theory of finite-dimensional algebras.

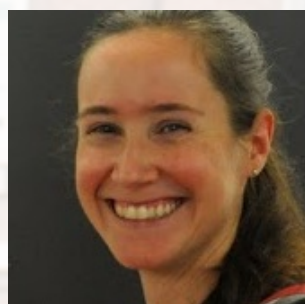


Friday, July 19, 2013

Luncheon Keynote: **American Pi: Changing the Stereotypes in Mathematics**

Research Talk: **On a Nonlocal Reaction Diffusion Equation:
Applications to Crime, Neural Networks, and Ecology**

Dr. Nancy Rodriguez is a Mexican-American NSF Postdoctoral Fellow in Mathematics at Stanford University. She graduated in Mathematics from the University of California at Los Angeles in 2011. Her research interests concern systems of partial differential equations which model crime patterns from the sociological point of view.



Friday, July 26, 2013

Luncheon Keynote: **Ph.D. Plus Epsilon: Life After Ph.D.**

Research Talk: **Hypergeometric Functions in Arithmetic Geometry**

Dr. Adriana Salerno is a Venezuelan Assistant Professor of Mathematics at Bates College. She graduated in Mathematics from the University of Texas at Austin in 2009. Her research interests include number theory, arithmetic geometry, special functions, and communicating mathematics to the general public. Dr. Salerno runs a blog for the American Mathematical Society (AMS) entitled *PhD + epsilon*.