

# Summer REU Colloquia: A Tour of the Mathematical Sciences

The Mathematics Departments at **Howard University** and **Purdue University**, in cooperation with the **Mathematical Biosciences Institute**, will host a series of virtual seminars throughout the month of July. These seminars will provide an opportunity for students in summer Research Experiences for Undergraduates (REUs) to gain exposure to various research topics in mathematics. These seminars will be held from 3:00 PM – 4:00 PM Eastern Daylight Time (EDT) via **WebEx**. You may either use the hyperlinks above to view the talks online, or call (415) 655-0003 (or the toll-free number (855)-282-6330) then enter the meeting number as the access code in order to hear the audio. All talks are free and open to the public. For more information, contact **Dr. Edray Goins** at (765) 494-1936 or [egoins@math.purdue.edu](mailto:egoins@math.purdue.edu); or **Dr. Talitha Washington** at (202) 806-6833 or [talitha.washington@howard.edu](mailto:talitha.washington@howard.edu).



Friday, July 3, 2015 from 3:00 PM – 4:00 PM (EDT)

## In Search of the Perpetrator: Application of Mathematics Using Graph Theory

Meeting Link: <http://tinyurl.com/oulsacy>  
Meeting Number/Access Code: 649 248 567  
Meeting Password: debnath

**Dr. Joyati Debnath** received both an M.S. in Mathematics and a Ph.D. in Applied Mathematics from Iowa State University in Ames, IA. She is Professor of Mathematics and Statistics at Winona State University in Winona, MN. Dr. Debnath's research interests include topological graph theory and coding theory. She is the main organizer of the Mathematical Association of America (MAA) Undergraduate Student Poster Session for the 2016 Joint Mathematics Meetings.



Friday, July 10, 2015 from 3:00 PM – 4:00 PM (EDT)

## Modeling Bike Sharing Networks

Meeting Link: <http://tinyurl.com/q7ekp2x>  
Meeting Number/Access Code: 640 337 978  
Meeting Password: hampshire

**Dr. Robert C. Hampshire** received a Ph.D. in Operations Research and Financial Engineering from Princeton University in Princeton, NJ in 2007. He is an Assistant Research Professor in the Human Factors Group at the University of Michigan's Transportation Research Institute in Ann Arbor, MI. Dr. Hampshire's research focuses on management, modeling, and optimization of services. He is a longtime attendee of the Conference for African-American Researchers in the Mathematical Sciences (CAARMS).



Friday, July 17, 2015 from 3:00 PM – 4:00 PM (EDT)

## Modularity of Surfaces

Meeting Link: <http://tinyurl.com/pcb3d2s>  
Meeting Number/Access Code: 649 130 773  
Meeting Password: leung

**Dr. Jennifer Johnson-Leung** earned her B.S. in Chemistry and Mathematics from the College of William and Mary in Williamsburg, VA in 1998, and her Ph.D. from the California Institute of Technology in Pasadena, CA in 2005. She is an Assistant Professor of Mathematics at the University of Idaho in Moscow, ID. Dr. Johnson-Leung's research interests include arithmetic geometry and automorphic representation theory. She is an active member of Women in Number Theory (WIN).



Friday, July 24, 2015 from 3:00 PM – 4:00 PM (EDT)

## Is Violence Contagious? Exploring the Relationship between Environment and the Diffusion of Violence Using an Epidemic Modeling Approach

Meeting Link: <http://tinyurl.com/qxeuwox>  
Meeting Number/Access Code: 643 767 946  
Meeting Password: wiley

**Dr. Shari Wiley** earned a B.S. in Mathematics from the University of Arkansas at Pine Bluff in 2002, and a Ph.D. in Mathematics from Howard University in Washington, DC in 2010. She is an Assistant Professor of Mathematics at Hampton University in Hampton, VA. Dr. Wiley's research interests include dynamical systems, ecological modeling, and curve fitting. She is a member of the Society of Mathematical Biology (SMB).



Friday, July 31, 2015 from 3:00 PM – 4:00 PM (EDT)

## The Power of Mathematics: How Discrete Models are Used to Understand the World

Meeting Link: <http://tinyurl.com/q3vswas>  
Meeting Number/Access Code: 648 889 206  
Meeting Password: prieto

**Dr. Alicia Prieto Langarica** received her B.S. degree in Applied Mathematics from the University of Texas at Dallas, and Ph.D. in Mathematics from the University of Texas at Arlington. She is an Assistant Professor of Mathematics and Statistics at Youngstown State University in Youngstown, OH. Dr. Prieto's research interests include the study of how cells move and why they move. She is an active member of the Society for Advancement of Hispanics/Chicanos and Native Americans in Science (SACNAS).

