



Eight Annual National Alliance for Doctoral Studies in the Mathematical Sciences Field of Dreams Conference

November 7-9, 2014

Friday, November 7

Time	Event
12:00-6:00 pm Atrium	Registration
1:00-2:30 pm Kiva Room	<p>Maximizing Opportunities Interactive workshop</p> <p>Facilitators: Dr. Syvillia A. Averett, Central State University; Dr. Brandy Wieggers, Central Washington University; Dr. Candice Price, United States Military Academy, West Point; Dr. Reginald McGee, Purdue University; Dr. Michelle Guinn, Belmont University</p>
2:30-6:00 pm Kiva Room	<p>Presentations by Math Science Institute Post-Doctoral Fellows There are nine NSF-funded mathematics institutes in the United States: AIM, IAS/PCMI, ICERM, IMA, IPAM, MBI, MSRI, NIMBioS, and SAMSI. Among other things these institutes host Post-doctoral students. This session will highlight the research of several of these post-docs.</p> <p>Moderator: Dr. Philip Kutzko, University of Iowa</p> <p>ICERM— Dr. Emily Russell, Brown University "Mathematical Models of Self-Assembly"</p> <p>IMA— Dr. Humberto Naves, University of Minnesota "Playing Tic-Tac-Toe on graphs"</p> <p>MBI— Dr. Karly Jacobsen, The Ohio State University "Mathematical modeling of cancer-fighting viruses"</p> <p>MSRI— Dr. Emille Lawrence, University of San Francisco "Symmetries of Möbius Ladders"</p> <p>NIMBioS— Dr. Angela Peace, University of Tennessee "Ecological Stoichiometry and its Role in Population Models"</p> <p>SAMSI— Dr. Daniel Taylor Rodriguez, Duke University "Automatic Bayesian variable selection for well-formulated models"</p> <p>SAMSI— Dr. Kimberly Kaufeld, North Carolina State University "Predicting Mountain Pine Beetle Damage using a Spatio-Temporal Model"</p>
6:30-8:30 pm Kiva Room Hors d'oeuvres to be served	<p>National Alliance Networking Reception</p> <ul style="list-style-type: none"> • Math Science Institute Informational Tables • Doctoral Student Poster Presentations • Employment Opportunities • Exhibitors Fair
8:00-10:30 pm	<p>Alliance Community Networking</p> <ul style="list-style-type: none"> • There will be an opportunity for graduating doctoral students to meet informally with representatives of math science departments who will be advertising positions for Fall 2015 (<u>Poblano Room</u>) • Rooms have been reserved for Student/Faculty networking (<u>Pueblo Room, Serrano Room and Kiva Room</u>) • Regional Meetings (<u>Kachina Rooms A & B(divided)</u>)

Saturday, November 8

Time/Location	Event
7:30-12:00pm Atrium	Registration
7:30-8:00 am Atrium	Breakfast
8:00-8:30 am Kiva Room	<p>Welcome</p> <ul style="list-style-type: none"> • Dr. Philip Kutzko, Professor of Mathematics, University of Iowa and Director, National Alliance for Doctoral Studies in the Mathematical Sciences • Dr. Al Boggess, Professor of Mathematics and Director, School of Mathematical and Statistical Sciences, Arizona State University • Dr. William Y. Vélez, Professor of Mathematics, University of Arizona • Dr. Carlos Castillo-Chavez, Director, Simon A. Levin Mathematical, Computational and Modeling Sciences Center; Regents and Joaquin Bustoz Jr. Professor, Arizona State University
8:30-9:15 am Kiva Room	<p>Field of Success How to succeed in a math science doctoral program. Alliance PhD graduates tell their stories.</p> <p>Moderator: Dr. Kimberly Weems, North Carolina State University Panel: Dr. Ricardo Cordero-Soto, California Baptist University; Dr. Victor Vega, College of Coastal Georgia; Dr. Syvillia A. Averett, Central State University</p>
9:15-10:00 am Kiva Room	<p>Math Science Talk- <i>On The Subtle Influence of Style & Culture in STEM Disciplines</i> Dr. Sylvester Gates—Professor of Physics, University of Maryland</p> <p>Many years ago, Dr. Abdus Salam (physics Nobel Laureate) made the comment to the speaker that he was convinced when a sufficient number of people of the African diaspora entered the discipline of physics, something like 'Jazz' would appear in the field. This presentation explores the meaning of this unusual comment.</p>
10:00-10:15 am	Break
10:15-11:00 am Kiva Room	<p>The Uniform Admissions Process/Facilitated Graduate Applications Process</p> <p>Starting in 2013-14, the Alliance initiated its Uniform Admissions Process. This program provided Alliance pre-doctoral scholars with the opportunity to apply to Alliance graduate programs. We have improved this process in several ways and have renamed it the Facilitated Graduate Applications Process (FGAP). Professor William Vélez will describe this process and the improvements that were made. Several students who went through this process will describe their experience.</p> <p>Facilitator: Dr. William Vélez, University of Arizona Panel: Bradley Holloway, University of Georgia; Dr. John Rock, California State Polytechnic University, Pomona; Dr. Tuncay Aktosun, University of Texas at Arlington, Jasmine Jackson, Arizona State University</p>
11:05-11:50 am Kachina Room	<p>Mentoring at the Doctoral Level Alliance Doctoral Mentors will discuss their experiences and lessons learned. They will discuss the role that mentors play at PhD granting departments and give some practical advice for new mentors.</p> <p>Moderator: Dr. Russell Brown, University of Kentucky Panel: Dr. Leslie McClure, University of Alabama at Birmingham; Dr. Robert Ankenmann, University of Iowa; Dr. David Goldberg, Purdue University</p>

11:05-11:50 am Pueblo Room	<p>Mentoring at the Predoctoral Level Panelists will discuss best practices for mentors at undergraduate and Master’s granting institutions.</p> <p>Moderator: Dr. Tuncay Aktosun, University of Texas at Arlington Panel: Dr. Lester Jones, Xavier University of Louisiana; Dr. Brian Loft, Sam Houston State University; Dr. Mark Tomforde, University of Houston</p>
11:05-11:50 am Kiva Room	<p>Surviving the Doctoral Experience (<i>for predoctoral and doctoral students only!</i>)</p> <p>Moderator: Dr. Candice Price, United States Military Academy, West Point Panel: Iris Alvarado, University of Texas at Arlington; Aqeeb Sabree, University of Iowa; Kamuela Yong, Arizona State University</p>
12:00-12:45 pm Kiva Room	<p>Lunch 12:15 pm – Math Alliance Research Study Presenter: Dr. Casey George-Jackson, University of Illinois at Urbana–Champaign</p>
1:00-2:00 pm Kiva Room	<p>Academic Careers in the Mathematical Sciences Panelists will discuss the many different opportunities available to PhDs in the mathematical sciences.</p> <p>Moderator: Dr. Charles Moore, Washington State University Panel: Dr. Greg Samsa, Duke University; Dr. Roderick Holmes, Texas Southern University; Dr. Giovanna Lloset, California State University, San Bernardino</p>
1:00-2:00 pm Kachina Room	<p>The Alliance: Recent Developments and Future Prospects</p> <ol style="list-style-type: none"> 1. The Alliance is proud to announce we have added five new Graduate Program Groups (GPGs) since last year! They are: Duke University, Department of Biostatistics and Bioinformatics; Oregon State University, Department of Mathematics; Purdue University, Department of Mathematics; University of California, Merced, Department of Applied Mathematics, and University of Kentucky, Department of Mathematics. We will be introducing representatives of these GPGs at this session. Following this Phil Kutzko will discuss the future of the Alliance over the next 3-5 years. 2. We are honored that Dr. Jennifer Pearl, NSF PD on the Alliance grant, will be joining us this year. Dr. Pearl will be describing opportunities at NSF and will be available for questions from the audience. <p>Presenter: Dr. Phil Kutzko, University of Iowa, Dr. Jennifer Pearl, NSF</p>
2:05-3:00 pm Kiva Room	<p>Paths to the doctorate: finding the right graduate program for you As a graduating senior you are faced with many choices when it comes to selecting a graduate program. Should you enter a doctoral program, select a Master’s program or one of the new post baccalaureate programs before entering a doctoral program? How will you know which program is the best fit for you? How do you succeed in a math science graduate program? Our panelists, all of them math sciences faculty, will address these questions.</p> <p>Moderator: Dr. Dan Frohardt, Wayne State University Panel: Dr. Ruth Haas, Smith College; Dr. Joaquin Rivera, University of Puerto Rico at Humacao; Dr. Renato Feres, Washington University</p>
2:05-3:00 pm Pueblo Room	<p>Mentoring across the Transition This will be an informal discussion among alliance mentors about their students’ transition into graduate school.</p> <p>Facilitators: Dr. Ulrica Wilson, Morehouse College and Dr. Loek Helminck, North Carolina State University</p>

2:05-3:00 pm Kachina Room	<p>How to Prepare for your first academic position</p> <p>Each of the various faculty positions in the mathematical sciences requires special skills and training. Our panelists will discuss ways in which you can gain these qualifications while in graduate school.</p> <p>Moderator: Dr. Donald Cole, University of Mississippi Panel: Dr. Steven Miller, Williams College; Dr. Damon Hay, Sam Houston State University; Dr. Roummel Marcia, University of California, Merced</p>
3:05-4:00 pm Kiva Room	<p>Summer programs</p> <p>Summer internships are a great way to learn more about the climate and culture of graduate school.</p> <p>Moderator: Dr. Morris Kalka, Tulane University Panel: Dr. Jonathan Hodge, Grand Valley State University; Dr. Sarah Reznikoff, Kansas State University; Dr. Anuj Mubayi, Arizona State University</p>
3:05-4:00 pm Kachina Room	<p>The Alliance Statistics Initiative</p> <p>Dr. Kimberly Weems, North Carolina State University and Dr. Leslie McClure, University of Alabama at Birmingham will discuss recent developments by the Alliance Statistics Initiative.</p>
3:05-4:00 pm Pueblo Room	<p>Careers in Industry and Government</p> <p>Moderator: Dr. David Finch, Oregon State University Panel: Dr. Steven Damelin, Mathematical Reviews; Dr. Paulette Willis, Reasoning Minds; Dr. Tina Dube, The EMMES Corporation</p>
4:00-6:00 pm Atrium Light snacks	<p>Graduate Department /Career/Summer Programs Fair</p>
6:15-6:30 pm Kiva Room	<p>Dinner seating</p>
6:30-9:00 pm Kiva Room	<p>Banquet & Keynote Presentation</p> <ul style="list-style-type: none"> • Introductions: Dr. Philip Kutzko, University of Iowa • Keynote speaker: Dr. Joan Evans, Texas Southern University

Sunday, November 9

Time/Location	Event
8:00-10:00 am Pueblo Room	<p>Breakfast Buffet/Grab and Go</p>
8:30-11:30 am Kiva Room	<p>Alliance Faculty/Mentors Meeting</p> <p>Overview and report on Alliance and from the Regional Alliances. This session will be devoted to discussing the possibility of further growth in this area.</p>