



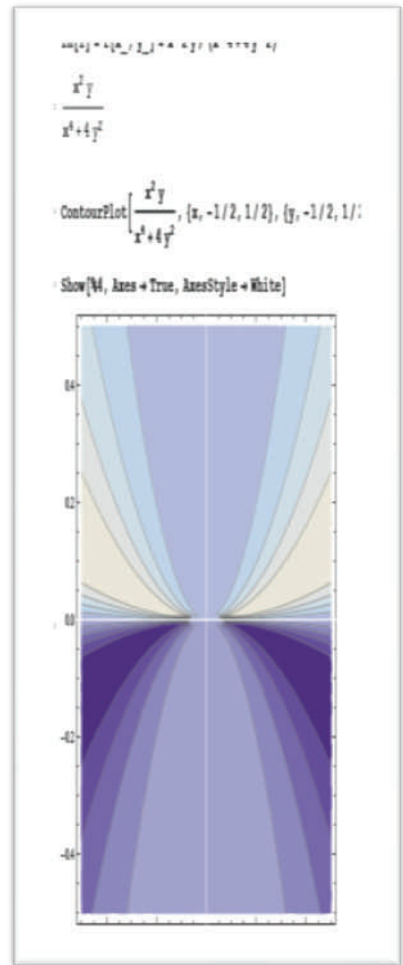
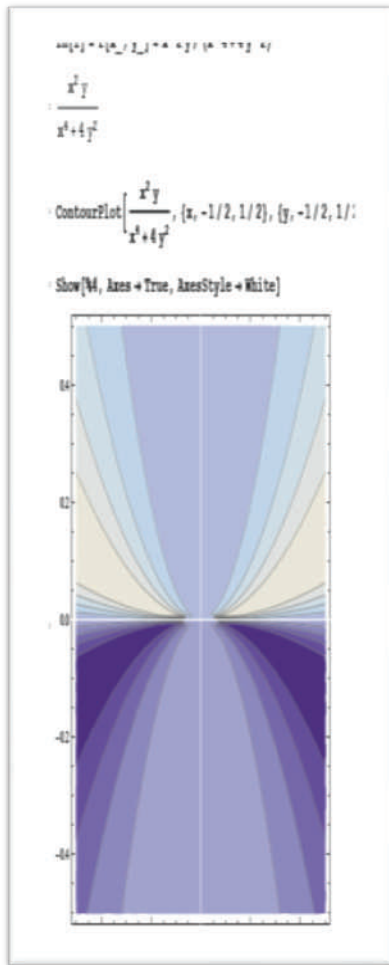
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# Progress in Integrating Technology in Teaching and Learning Mathematics at Historically Black Colleges and Universities (HBCUs)

## SUMMER CALCULUS WORKSHOP

MAY 15-16 2014

JACKSON STATE UNIVERSITY





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## ***AGENDA***

**May 15, 2014**

**8:00 -8:30 a.m.**

**Just Hall of Science (JSH)**

**Lobby**

**Registration and Sign in**

**8:30– 8:45 a.m.**

**Opening Session JSH Room 102**

Welcome and Overview

Dr. Tor Kwembe, Professor and  
Chair, Department of Mathematics,  
Principal Investigator

Greetings

Dr. Roosevelt Gentry, Professor,  
Department of Mathematics  
Co-PI & Workshop Instructor

Dr. Celestin Wafo Soh,  
Associate Professor,  
Department of Mathematics,  
Co-PI & Workshop Instructor

Dr. Zhenbu Zhang,  
Associate Professor,  
Department of Mathematics,  
Workshop Instructor

Dr. Jana Talley,  
Assistant Professor,  
Department of Mathematics,  
Program Co-PI

**8:45-9:15 a.m.**

**Project Survey**

Dr. Carol Livingston,  
Associate Professor,  
University of Mississippi  
External Evaluator



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9:15-11:30 a.m.

**Session A** **Concurrent *Mathematica* Workshop Sessions**

**JSH 102**

**Dr. Roosevelt Gentry**

**JSH 103**

**Dr. Celestin Wafo Soh**

**JSH 122**

**Dr. Zhenbu Zhang**

11:30 -1:00 p.m.

*LUNCH*

1:00-2:30 p.m.

**Session B** ***Mathematica* Workshop Sessions**

**JSH 102**

**Dr. Roosevelt Gentry**

**JSH 103**

**Dr. Celestin Wafo Soh**

**JSH 122**

**Dr. Zhenbu Zhang**

2:30-3:00 p.m.

*BREAK*

3:00-4:30 p.m.

**Session C** ***Mathematica* Workshop Sessions**

**JSH 102**

**Dr. Roosevelt Gentry**

**JSH 103**

**Dr. Celestin Wafo Soh**

**JSH 122**

**Dr. Zhenbu Zhang**

5:30 p.m. -

*DINNER*

**May 16, 2014**

**8:00 -8:30 a.m.**

**Just Hall of Science (JSH)**

**Lobby**

**Registration and Sign in**

8:30-9:30 a.m.

**General Session**



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JSH 102

**Dr. Tor A. Kwembe**

*Undergraduate Research in the Mathematical Sciences, Techniques, Methods and Technology– Utilizing Wolfram Workbench*

9:30 – 11:30 a.m.

**Mathematica Workshop Sessions**

**Session D**

JSH 102

**Dr. Roosevelt Gentry**

JSH 103

**Dr. Celestin Wafo Soh**

JSH 122

**Dr. Zhenbu Zhang**

11:30 – 1:00 p.m.

**Luncheon**

**JSH 103**

*Training of Mathematics and Statistics majors to confront emerging challenges in Computational Data-Enabled Science and Engineering-Its impact on the discipline and Society*

**Dr. Richard Alò, Dean,  
College of Science, Engineering and  
Technology, Jackson State University**

1:00-2:30 p.m.

**Mathematica Workshop Sessions**

**Session E**

JSH 102

**Dr. Roosevelt Gentry**

JSH 103

**Dr. Celestin Wafo Soh**

JSH 122

**Dr. Zhenbu Zhang**

2:30-3:00 p.m.

**BREAK**

3:00-4:30 p.m.

**Mathematica Workshop Sessions**

**Session F**

JSH 102

**Dr. Roosevelt Gentry**

JSH 103

**Dr. Celestin Wafo Soh**

JSH 122

**Dr. Zhenbu Zhang**

5:30 p.m.

**Closing Session**



## PARTICIPANTS



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NAME	AFFILIATION
Dr. Tapan Tiwari	Department of Mathematical Sciences, Alcorn State University, Lorman, MS
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Dr. Jana Talley	Department of Mathematics, Jackson State University, Jackson, MS
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Dr. Roy Caston	Department of Mathematics and Computer Science, Tougaloo College, Tougaloo, MS
Dr. Elizabeth Wells	Department of Mathematics and Computer Science, University of Arkansas at Pine Bluff (UAPB)



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### **Workshop Instructors**

*Roosevelt Gentry, Ph.D., Professor of Mathematics*  
*Celestin Wafo Soh, Ph.D., Associate Professor of Mathematics*  
*Zhenbu Zhang, Ph.D., Associate Professor of Mathematics*

### **Program Management Team:**

*Danling Chen, Associate Professor of Mathematics*  
*Roosevelt Gentry, Professor of Mathematics*  
*Tor A. Kwembe, Professor of Mathematics and Principal Investigator*  
*Jana Talley, Assistant Professor of Mathematics*  
*Celestin Wafo Soh, Associate Professor of Mathematics*

### **Program External Evaluator:**

*Carol Livingston, Associate Professor of Education, University of Mississippi, Oxford, Mississippi*

### **Major Goals:**

The major goals of the project are to (1) develop mathematics faculty expertise at participating HBCUs in the use of *Mathematica* as a teaching, learning and research tool in the mathematical sciences and (2) promote year-long technology aided undergraduate research in the mathematical sciences at HBCUs.

### **Specific Objectives:**

The specific objectives are: (1) train 30 HBCUs mathematics faculty each year for two years to gain expertise in integrating the *mathematica* software in the teaching and learning of calculus and upper division mathematics courses, (2) each participating faculty will engage one mathematics major per year of NSF funding from their institutions in a year-long research experience and place the student in a summer research experience at other institutions, and (3) to train each participating faculty on how to develop *mathematica* course guidelines and manuals integrating programming with mathematica and course delivery.

### **Acknowledgement:**

**The Workshop is supported by NSF Award 1214359**

***Industrial Support***



**Wolfram Research, INC**





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*Mathematica Workshop Working Groups*  
**JSH 103**

<b>Name</b>	<b>School</b>
<b>Celestin Wafo soh (INSTR)</b>	JSU
Candace Carter Stevens	MVSU
Latonya Garner	MVSU
Xing Yang	JSU
Tapan Tiwari	ASU
Krishna Aditya	ASU
Zheng Chen	SUNO
Rachid Belmasrou	SUNO
Lixin Yu	ASU
Jana Talley	JSU

**JSH 102**

<b>Name</b>	<b>School</b>
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Carmen Wright	JSU
Lee Redmond	MVSU
Sandra Course	MVSU
Constance G. Bland	MVSU
Roy Caston	TGL
Elizabeth Wells	UAPB

**Back-up participant: Dr. Frank Yeh**

**JSH 122**

<b>Name</b>	<b>School</b>
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Michael McCoy	RUST
Mehdi Moghbel	RUST
Bilal Abu Bakr	ASU
Ping Zhang	ASU
Tchavdar Marinov	SUNO
Delin Tan	SUNO
Mostafa Elaasar	SUNO