

Special Thanks

We are especially grateful to the faculty and staff in the Departments of Mathematics and Statistical Sciences, Electrical and Computer Engineering, Civil and Environmental Engineering, and Physics, Atmospheric Sciences and Geoscience for planning the events and judging the competitions. We also acknowledge the invaluable support of JSU students who volunteered.

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National Science Foundation (NSF) Grant Award DMS: 1330801 under the EXTREEMS-QED Activities

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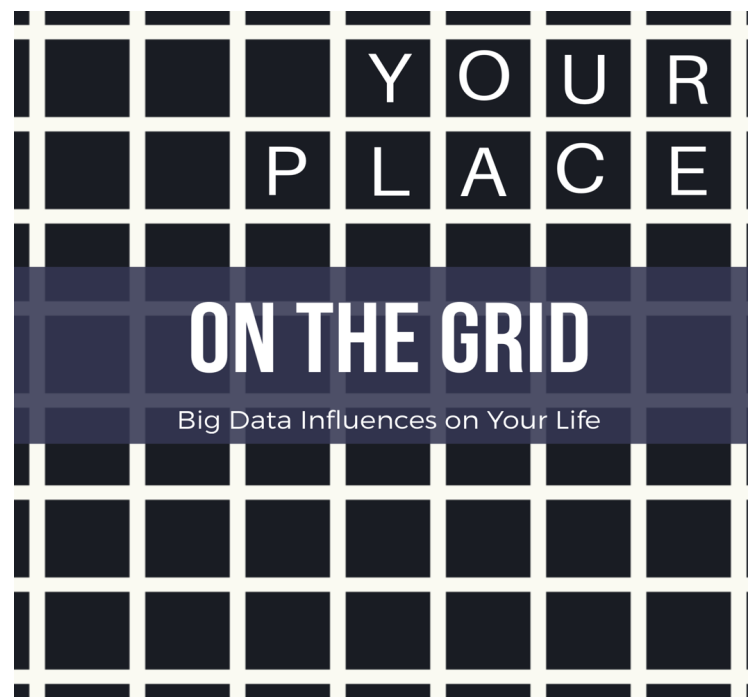
Department of Mathematics and Statistical Sciences

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37th Annual Mathematics and Engineering Fair

College of Science, Engineering and Technology
Jackson State University

March 31, 2017
Opening and Closing Sessions
Just Science Hall Room 115

Theme

This year the Mathematics and Engineering Fair theme is **Your Place on the Grid: Big Data Influences on Your Life**. With any profession large volumes of data will affect and shape your daily choices and decisions in the workplace. While knowledge of your field of study is necessary to be successful in healthcare, politics, and business and other industries; the technological age that we live in also requires the ability to collect, analyze, understand and communicate an enormous amount of information, or 'Big Data'. To effectively utilize Big Data professional training in mathematics, statistical science, and computer science is needed.

NOTES**Schedule-at-a-Glance**

8:00 – 8:55 a.m.	Registration Just Science Hall West Foyer
9:00 – 9:30 a.m.	Opening Session Greetings, Introductions, and Instructions
9:35 – 10:45 a.m.	Written Examination for ALL Students Teachers' Seminar Judging of Mathematics Project Display (Set-up 8:00 – 8:55 a.m.)
10:50 – 11:50 a.m.	Mathematics Bowl Competition—Round 1 Bridge Design and Construction Competition Fun With Calculators Competition LISA– QED: Visualization Lab Demonstration
11:50 – 12:50 p.m.	Lunch Public Viewing of Mathematics Projects
1:00 – 1:40 p.m.	Mathematics Bowl Competition—Round 2
1:00 – 2:20 p.m.	Math Trail Competition
1:00—2:30 p.m.	Campus Tour and Other Recruitment Activities
1:45 – 2:40 p.m.	Mathematics Bowl Competition Final Round
2:45 – 3:20 p.m.	Closing Session Presentations of Awards

Registration 8:00 a.m. —8:50 a.m.

Just Science Hall West Foyer
Ms. Gretta Mabry, Coordinator

Mathematics Display Set-up

Just Science Hall Room 122
All Mathematics Displays should be set up prior to 9:30 a.m.

Opening Session 9:00—9:30 a.m.

Just Science Hall—Room 115
Dr. Roosevelt Gentry, Presiding
Professor of Mathematics

Greetings from the University Dr. Evelyn J. Leggette,
Provost & Vice President for Academic
and Student Affairs

Greetings from the College & Overview Dr. Wilbur Walters,
Associate Dean of Undergraduate Programs,
Recruitment & Retention, College of
Science, Engineering & Technology

Greetings from the Department of
Mathematics and Statistical Sciences Overview Dr. Tor A. Kwembe,
Chair, Department of
Mathematics and Statistical Sciences

Undergraduate Studies Overview Dr. Marie O’Banner-Jackson
Dean of Undergraduate Studies

Session Five 2:45—3:20p.m.

Dr. Roosevelt Gentry, Presiding
Just Science Hall Room 115

William White Award

Dr. Roosevelt Gentry

Presentation of Awards for
Individual Events

Ms. Renata Davis

Presentation of Awards for
Team Events

Dr. Tor A. Kwembe

Presentation of Nissan Scholarships and
Awards

Mr. Gino Perkins, CMRP, CAMA
Nissan North America, Inc.
Manager Technical Training
Maintenance Sr. Expert
Alliance Production Way

Closing Remarks

Dr. Jun Liu
Dr. Tor A. Kwembe

Math Trail Competition 1:00—2:20 p.m.

Just Science Hall Room 202
Mrs. Alicia K. Jefferson, Coordinator

Campus Tour & Recruitment Activities 1:00—2:30 p.m.

Just Science Hall Room 115
Office of Recruitment

Final Round—Mathematics Bowl Competition 1:45—2:40 p.m.

Three Highest Scoring Schools

Just Science Hall Room 103
Dr. Zhenbu Zhang, Ms. Renata Davis, Paris Smith,
Comelia Walker, & Christopher Rosser —Judges

Mathematics Bowl Competition
Dr. Bassirou Diatta, Coordinator

Session Two 9:35—10:35 a.m.

Student Participants - Mathematics Written Examination

Room 115 Just Science Hall
Canton, Collins, Crystal Springs, Durant., Forest Hill

Room 148 Just Science Hall
Hazlehurst, Provine, and Velma Jackson
Dr. Celestin Wafo Soh, Coordinator

Proctors: Ms. Renata Davis and Dr. Celestin Wafo Soh

Teachers' Mathematics Seminar

Raman Applications for Disease Detection: Raman is a powerful technology with broad applications. Here, I will discuss how it has been used for biological tissue analysis and disease detection. Examples include bone quality analysis, tooth decay detection, and Gout crystal analysis.

Just Science Hall
Room 250
Dr. Shan Yang, Presenter
Dr. Lecretia A. Buckley, Coordinator

Judging of Mathematics Project Displays

Just Science Hall
Room 122
Dr. Zhenbu Zhang, Coordinator

Session Three

10:45 —11:45 a.m.

Round 1—Mathematics Bowl Competition

Site 1—Just Science Hall Room 102

Velma Jackson and Durant

Dr. Daning Chen, Dr. Wang, Paris Smith & Comelia Walker —Judges

Site 2—Just Science Hall Room 103

Collins, Forest Hill and Crystal Springs

Dr. Zhenbu Zhang, Dr. Caixia Chen, Christopher Rosser & Semenbari E. Yakubu —Judges

Site 3—Just Science Hall Room 203

Canton, Hazlehurst, and Provine

Dr. Xing Yang, Ms Renata Davis, Toneca Pickens & Deuntae Sheard —Judges

Bridge Design and Construction Competition

Engineering Building Lobby
Dr. Himangshu Das, Coordinator

Fun with Calculators Competition

Just Science Hall Room 105
Dr. Roosevelt Gentry, Coordinator

Visualization Lab Demonstration

Department of Mathematics and Statistical Sciences

Visualizations of scientific research on stunning high-resolution monitors in a captivating screen experience.

Just Science Hall Room 125
Dr. Carmen Wright, Coordinator

LUNCH 11:50—12:55 p.m.

Lunch tickets will be distributed during registration to teachers.
Lunch tickets are for dining in the Heritage Student Dining Hall.

Public Viewing of Mathematics Projects

Just Science Hall
Room 122

Session Four 1:00 —2:40 p.m.

Round 2—Mathematics Bowl Competition 1:00—1:40 p.m.

Site 1 — Just Science Hall Room 102

Velma Jackson, Forest Hill and Provine

Dr. Daning Chen, Dr. Ningning Wang,
Paris Smith & Comelia Walker —Judges

Site 2 — Just Science Hall Room 103

Canton, Crystal Springs and Durant

Dr. Zhenbu Zhang, Dr. Caixia Chen, Ms. Renata Davis,
Christopher Rosser, & Semenbari E. Yakubu, —Judges

Site 3 — Just Science Hall Room 204

Hazlehurst, and Collins

Dr. Xing Yang and Dr. Jana Talley
Toneca Pickens & Deuntae Sheard— Judges