COLLEGE OF ARTS & SCIENCES

## **End-of-Semester Celebration of Mathematics and Statistics**

Organized by the Mathematics and Statistics Club at Georgia State

Friday April 12, 10:45am-2:45pm, 796 COE (light lunch will be provided)

Presentation of Student Awards (12:50 pm):

The Winners of the Ninth Annual Undergraduate Mathematics Competition

## **RIMMES** presentations:

10:45-10:55am

**Adil Virani**: *Probability distributions for targeting performances for a neural growth model*, <u>Mentor: Dr. Remus Osan</u>

11:00--11:10pm

**Deiverick F. Brown-Burnett:** Building Technology Supported Environments for Teaching Undergraduate Mathematics Courses to Early Childhood/Middle Level Prospective Teachers, Mentor: Dr. Margo Alexander

11:15--11:25am

**Kinin Kone:** *Modeling Mathematical Structures in Indigenous 3D Artifacts*, <u>Mentor:</u> Dr. Yi Jiang

11:30—11:40pm

Sarah Deigna: Math and Art: Describing Indigenous Cultures, Mentor: Dr. Yi Jiang

11:45-11:55am

**Jessica Gordon**: The zero-forcing numbers of signed Mobius Ladders,

Mentor: Dr.Marina Arav and Hein van der Holst

12:00-12:10pm

**Yawa Adonsou:** A better estimation of the confidence interval for Youden index, Mentor: Dr. Jeff Qin

12:15-12:25pm

Russell Jeter: Stochastically evolving dynamical network, Mentor: Dr. Igor Belykh

## 12:30-1:00pm: Light Lunch and Presentation of Awards for the Winners of the Annual Undergraduate Math Competition

1:00--1:10pm

**John Hull:** Restrictions of polynomial functions over finite fields, Mentor: Dr. Florian Enescu

1:15—1:25pm

**Jonathan Spencer:** Testing cognitive theories by creating a pattern-based probabilistic algorithm for melody and rhythm in jazz improvisation, Mentor: Dr. Mariana Montiel

1:30--1:40pm Discussion time

1:45--1:55pm

**Samuel Dillow**: The zero-forcing numbers of signed complete graphs using sign pattern matrices, Mentor: Dr. Marina Arav and Hein van der Holst

2:00--2:10pm

**Victor Bailey:** Some 4 by 4 sign pattern matrices that require 4 distinct eigenvalues, Mentor: Dr. Jason Li

2:15--2:25pm

**Danni Liu:** Statistical analyses of optical imaging data of the olfactory receptor neurons, Mentor: Dr. Remus Osan

2:30--2:40pm

**Aurelie Akossi** Using Rubato Composer's Functorial Approach to generate a multi-instrument composition,

Mentor Dr. Mariana Montiel