

## **2018 SMSS Undergraduates and Graduates Research Workshop**

**School of Mathematical and Statistical Sciences  
The University of Texas Rio Grande Valley**

**Date:** May 5, 2018  
**Location:** MAGC 2.208, Edinburg

### **Organizers:**

|                        |  |
|------------------------|--|
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### **Description:**

The mission of the SMSS Undergraduates and Graduates Research Workshop is to serve as a forum for dissemination of new scientific knowledge and discussion of mathematical ideas to foster interaction among students, faculty, and the local community. The workshop invites oral and poster presentations of scholarly work from all fields: pure mathematics, applied mathematics, statistics and mathematical education. Sessions will be classified and organized based on disciplines or themes. All SMSS undergraduate and graduate students, faculty, and staffs are welcome to attend. The SMSS encourages and facilitates research opportunities for SMSS undergraduates and graduates in all majors and class levels. The SMSS promotes research as a high impact student experience to enhance readiness to succeed in future careers.

Interested scholars should submit his/her abstract with presenters name, institution/organization, address, and email to Dr. Jasang Yoon no later than April 27, 2018.

The workshop is organized and sponsored by SMSS of UTRGV.

For further information, please contact Dr. Jasang Yoon at 665-3633 or via email [jasang.yoon@utrgv.edu](mailto:jasang.yoon@utrgv.edu).

**Chair of Workshop Session: Dr. Zhaosheng Feng**

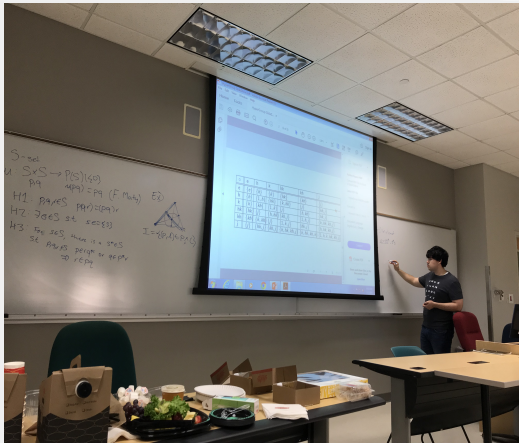
1. 9:30-9:40am: Dr. Tim Huber (Director of SMSS, UTRGV)– Opening address
2. 9:30-10:10am: Wei Wang (with Dr. Z. Feng)  
Title: Repulsion effect on superinfecting virions by infected cells for virus infection dynamic model with absorption effect and chemotaxis
3. 10:10-10:40am: Oscar Gonzalez (with Dr. P-H. Zieschang)  
Title: Involutions in Hypergroups
4. 10:40-11:10am: Juan Benitez Rodriguez (with Dr. J. Yoon)  
Title: The Riemann-Stieltjes Integral

**11:10-11:20am: Coffee Break**

5. 11:20-11:50am: Acadia Larsen (with Dr. B. Kronholm)  
Title: A generalization of partition identities for first differences of partitions  $n$  into at most  $m$  parts
6. 11:50-12:20pm: Qingtai Xiao (with Dr. B. Feng)  
Title: Discrepancy measures for uniformity qualification of bubbles movement in a direct contact heat exchanger

**12:30-13:30pm: Lunch**

7. 13:30-14:00pm: Jose Lopez Garcia (with Dr. S. Grigorian)  
Title: Complex geometry and Kähler structures
8. 14:00-15:00pm: Discussions on some presented topics and related research projects.



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