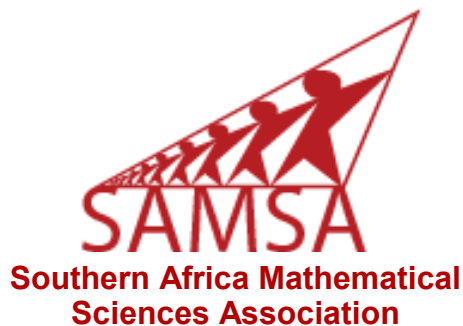


THE SAMSA MASAMU PROGRAM



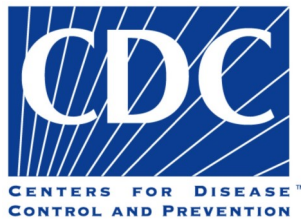
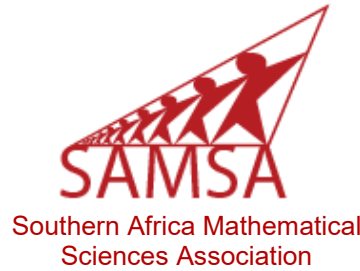
**The Seventh Annual Masamu
Advanced Study Institute (MASI) and
Workshops in Mathematical Sciences**

November 17th - 26th, 2017

Arusha, Tanzania

ACKNOWLEDGEMENTS

The Masamu Program would like to acknowledge the following sponsors:



THE SAMSA MASAMU PROGRAM

The Masamu (masamu means mathematics in Southern Africa) Program was established in 2010 through a grant from the US National Science Foundation (NSF). The primary goal of the program is enhancing research in mathematical sciences within Southern Africa Mathematical Sciences Association (SAMSA) institutions through promotion of international research collaboration. A key component of the Masamu Program is the Masamu Advanced Study Institute (MASI) and Workshop Series in mathematical sciences that provides a platform for such collaboration. Other planned activities include Research Workshop, Career Development Workshop, Department Heads and Chairs and Senior Research Scientists Workshop, Colloquia and Webinar Series, and AfricaMath. The target audiences of the MASI are graduate and undergraduate students and early career faculty (rank less than associate professor) while the workshops are open to students, faculty, and other researchers in the mathematical sciences.

The Masamu Advanced Study Institute (MASI) and Workshop Series in Mathematical Sciences program is a collaborative effort between African, European, Canadian, and US mathematicians. This program has three main goals: (1) Strengthen the US and Southern African human infrastructure in mathematical sciences research; (2) Drastically increase and sustain research collaboration between US, European, and Southern African mathematicians; and (3) Improve collaboration between US, European and Southern African colleges and universities.

In order to effectively use the MASI and Research Workshops, the Masamu Program has created a Collaborative Research Network consisting of 55 research faculty (26 Sub-Saharan Africa, 21 US, 2 Canada, and 6 Europe) forming 4 research teams in Pure Mathematics (Algebra and Geometry, Analysis and Topology, Coding Theory and Information Theory, and Graph Theory) and 4 research teams in Applied Mathematics (Epidemiological Modeling, Numerical Approximation of Solutions of Partial Differential Equations, Mathematics of Finance, and Statistics). Each research team has at least 4 faculty and at least 4 undergraduate and graduate students. The primary objectives of the network are to drastically increase both the quantity and quality of research publications and the number of PhD degrees, especially among women and underrepresented minorities, in each of the areas represented by the eight research teams in both the US and Sub-Saharan Africa, and promote research collaboration between European, Sub-Saharan Africa, and US mathematicians. Participants in this Collaborative Research Network take advantage of the annual SAMSA conferences, Masamu Institutes, and Workshops to meet face to face, work on research problems, plan research activities for the following year, and present their research findings.

About SAMSA: The Southern Africa Mathematical Sciences Association (SAMSA) was established in 1981 to further the mathematical sciences in the Southern African region (Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe) and beyond.

About the NSF: The National Science Foundation (NSF) is an independent US federal agency created by Congress in 1950 "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense..." In many fields such as mathematics, computer science and the social sciences, NSF is the major source of federal backing for America's colleges and universities.

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MASAMU PROGRAMS: 2011 - 2016



2011: Livingstone, Zambia



2012: Lilongwe, Malawi



2013: Stellenbosch, South Africa



2014: Victoria Falls, Zimbabwe



2015: Windhoek, Namibia



2016: Pretoria, South Africa

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2017 MASAMU PROGRAM RESEARCH GROUPS

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**2017 MASAMU ADVANCED STUDY INSTITUTE (MASI) AND
RESEARCH WORKSHOP
DAILY SCHEDULE**

<i>Friday, November 17:</i>		
Registration	11:00 – 5:00	Palace Hotel
Lunch	1:00 – 2:00	Palace Hotel
Institute	2:00 – 6:00	Palace Hotel
Break and Networking	6:00 – 7:00	
Dinner	7:00 – 8:00	Palace Hotel
<i>Saturday, November 18:</i>		
Institute	9:00 – 12:00	Palace Hotel
Lunch	12:00 – 2:00	Palace Hotel
Institute	2:00 – 5:00	Palace Hotel
Break and Networking	5:00 – 6:00	
Dinner	6:00 – 7:00	Palace Hotel
<i>Sunday, November 19:</i>		
Institute	9:00 – 12:00	Palace Hotel
Lunch	12:00 – 2:00	Palace Hotel
Institute/HPC Workshop	2:00 – 5:00	Palace Hotel
Break and Networking	5:00 – 6:00	
Dinner	6:00 – 7:00	Palace Hotel
<i>Monday, November 20:</i>		
SAMSA Conference (w/ Lunch)	8:00 – 4:30	Lush Garden Hotel
Break and Networking	4:00 – 5:30	
Dinner	6:00 – 7:30	Palace Hotel
Institute/HPC Workshop	7:30 – 10:00	Palace Hotel
<i>Tuesday, November 21:</i>		
SAMSA Conference (w/ Lunch)	8:30 – 5:30	Lush Garden Hotel
STEM Education Workshop*	10:30 – 5:30	Arusha Technical College
Break and Networking	5:30 – 6:00	
SAMSA Cocktail	6:00 – 7:00	Lush Garden Hotel
Dinner	7:00 – 8:30	Palace Hotel
Institute	8:30 – 10:00	Palace Hotel

**2017 MASAMU ADVANCED STUDY INSTITUTE (MASI) AND
RESEARCH WORKSHOP
DAILY SCHEDULE**

<i>Wednesday, November 22:</i>		
SAMSA Conference (w/Lunch)	8:30 – 4:30	Lush Garden Hotel
HPC/STEM Educ. Workshop**	4:30 – 6:00	Lush Garden Hotel
Break and Networking	6:00 – 7:00	
SAMSA Conference Dinner	7:00 – 10:00	Lush Garden Hotel
<i>Thursday, November 23:</i>		
SAMSA Conference (w/ Lunch)	8:30 – 2:00	Lush Garden Hotel
Excursions - Optional	2:00 – 7:00	
Dinner	7:00 – 8:00	Palace Hotel
Institute	8:30 – 10:00	Palace Hotel
<i>Friday, November 24:</i>		
Institute	9:00 – 12:00	Palace Hotel
Lunch	12:00 – 2:00	Palace Hotel
Institute	2:00 – 5:00	Palace Hotel
Break and Networking	5:00 – 6:00	
MASI Dinner	6:00 – 8:00	Palace Hotel
<i>Saturday, November 25:</i>		
Group Research Presentations	9:00 – 12:00	Palace Hotel
Lunch	12:00 – 2:00	Palace Hotel
Group Research Presentations	12:00 – 6:00	Palace Hotel
Dinner	6:00 – 7:00	Palace Hotel
<i>Sunday, November 26:</i>		
Planning Workshop (with Lunch)	9:00 – 1:00	Palace Hotel
Checkout and Networking	1:00 – 5:00	Palace Hotel
Depart for JRO	5:00	

*Mathematical Biology STEM Education Workshop will be held on Tuesday from 10:30 to 17:30 at Arusha Technical College.

**HPC/STEM Education Workshop for all SAMSA Conference participants will be held on Wednesday from 16:30 – 18:00 at Lush Garden Hotel..

