



NEWSLETTER

Issue 3

Your newsletter promoting research and mentoring of academics in Southern Africa



*SAMSA 2019 CONFERENCE
IN MALAWI*



SAMSA ON YOUTUBE





The President of SAMSA
Professor S. Motsa

We are delighted to bring you the third edition of the SAMSA Newsletter in 2019 which will be the last before we hold the 2019 SAMSA Annual Conference and the Masamu Advanced Study Institute (MASI) and Workshops in Mathematical Sciences. The latest information on the SAMSA conference be found on the website link <https://sites.google.com/must.ac.mw/samsa2019>. Information on the MASI workshops is available on the website <http://www.masamu.auburn.edu>. As always, this newsletter provides information on Mathematical Sciences related activities taking place in the region. We also shine a spotlight on SAMSA members who have made important contributions to the Mathematical Sciences community. Early career Mathematicians making waves in their research are also recognized. We continue to encourage members of SAMSA to support the development of future Newsletters by contributing articles and news items to the Newsletter editorial team.

The entire SAMSA executive team will be making the trek to Blantyre for the #SAMSA38 conference. We hope to meet you there!



The Vice President of SAMSA
Dr. F. J. Mhlanga

The 38th SAMSA conference is fast approaching and plans are in place to make it one of the memorable conferences. This time we will meet in Blantyre at Malawi Sun Hotel. The conference will start on the 25th until the 28th of November 2019.

This conference will create a platform for the dissemination of scientific ideas and results, networking and formation of collaboration teams among mathematical scientists and present an opportunity for upcoming researchers to engage with seasoned experts in the mathematical sciences. Interesting talks from both young and old Plenary and Guest Speakers are lined up and we hope delegates will find them inspiring and constructive.

Several parallel sessions are also in place for specific discipline presentations. Presentation at the conference will cover all fields of mathematical sciences including but not limited to: algebra, analysis, geometry, fluid dynamics, discrete mathematics, financial mathematics, mathematical biology, mathematics for industry, mathematics education, theoretical physics, statistics and data science.

Delegates are advised to make travel arrangements in time as making travel arrangements closer to the date of travel may be costly. Delegates are also encouraged to visit the conference website for detailed information and contact details for accommodation choices and bookings. Delegates will be transported from the airport (Blantyre) to their respective hotels by the Local Organising Committee. Delegates are, therefore, urged to email travel itinerary to the Local Organising Committee.

The SAMSA Executive Committee would like to wish you all a safe travel to Blantyre, Malawi for the 38th SAMSA conference.

To promote the SAMSA 2019 conference and to create awareness of SAMSA activities, we encourage members to tweet the highlights of the conference using the hashtag #SAMSA38



The Chief Editor
Dr. Joseph Malinzi

It is our pleasure to bring you the third edition of the 2019 SAMSA newsletter. We have come a long way and hope to get better each and every time we bring to you this bulletin. The current episode continues to highlight achievements made by SAMSA members and announce upcoming activities. **We are now on YouTube where members can upload their videos on activities such as conference presentations and plenary talks.** [Click Here to view the channel](#). We urge you to please send in your achievements including conference participation, grant awards and research visits. If we can not support and promote ourselves, who will?

We look forward to seeing you in Blantyre.

CONGRATULATIONS PROFESSOR MAKINDE



The former Vice President of SAMSA, Professor O. D. Makinde (*Left*) has been awarded the Stellenbosch University Chancellor Award 2019. This is in recognition to his continued contribution to research excellence. SAMSA family congratulates him on this well deserved award.

CONGRATULATIONS PROFESSOR DI NUNNO



Congratulations are extended to Giulia Di Nunno for being awarded the Su Buchin Prize for 2019 by the International Council for Industrial and Applied Mathematics (ICIAM). Giulia Di Nunno is a Professor of stochastic analysis at the University of Oslo, a member of the Executive Team of CIMPA, a loyal SAMSA member and a regular participant in all SAMSA conference. She was awarded the Su Buchin Prize in recognition for her work in promoting Mathematical Sciences research in African countries

NOTICES



1. SAMSA CONFERENCE 2022— Call for Conference host

Any institution wishing to host the annual SAMSA conference in 2022 should please contact the secretary of the Executive Committee by 30 March 2020.

The contact details for the secretary are:

Dr. John B. Hatson Njagarah

Department of Mathematics and Statistical Sciences

Botswana International University of Science and Technology,

Private Bag 16,

Palapye, Botswana

Email: njagarahh@biust.ac.bw



2. COMMUNICATION TO SAMSA MEMBERS

The SAMSA Executive Committee communicates with SAMSA members through the SAMSA mailing list. Please ensure that your name is on the list or is added to the list so that you can receive updates from the SAMSA Executive Committee. If you are not on SAMSA mailing list, please contact:

The SAMSA President on email address sandilemotsa@gmail.com

or The SAMSA Secretary on email address: njagarahh@biust.ac.bw

CONFERENCES ATTENDED BY MEMBERS



ICMSA 2019

The President of SAMSA, Professor S. Motsa, The Vice President, Dr. F. J. Mhlanga and The Treasurer, Dr. F. Chirove attended the International Conference on Mathematical Sciences and Applications (ICMSA 2019), with the theme, "Abstract mathematics and mathematical modelling and applications in a multi-disciplinary context". The conference took place on 25 to 27 September 2019 at the Saint George Hotel, 58 Goede Hoop Ave, Doornkloof, Pretoria, South Africa and was hosted by the Department of Mathematical Sciences, UNISA.

Dr. F.J. Mhlanga was an invited Guest Speaker to the session on PDEs and Applications while Dr. F. Chirove was a Plenary Speaker to the session on Biomathematics. Professor Motsa participated in the session on Numerical Analysis where presented a talk on how demonstration apps can be used in the research and teaching of computational sciences.

The conference brought together academic scientific researchers, scholars and postgraduate students working in fields of mathematical sciences and applications. The conference was well attended and well organised. The conference gave SAMSA representatives the platform to market the forthcoming Annual SAMSA Conference in Blantyre, Malawi.

ICAMCS 2019



One of the SAMSA members, Isabel Linda Moyo, a PhD student at NUST, Zimbabwe and a research fellow at the Indian Institute of Technology, Roorkee, India, attended and presented a paper, at the International Conference on Applied Mathematics and Computational Sciences (ICAMCS 2019).

The conference took place at DIT University, Dehradun, India and was hosted by the Department of Mathematics.



MoCAH 2019

Dr. Farai Chirove and Dr Joseph Malinzi participated in the Modelling in the Context of African Health, a joint conference of UKZN (under the African Health and Big Data flagships) and the CoE-MaSS (WITS) that took place from the 14-16 October, 2019 at Protea Hotel Edward in Durban, South Africa. Dr. F. Chirove was an invited Plenary Speaker-He gave a talk entitled 'All models are wrong but some are more useful: Lessons from modelling within host dynamics of HBV infection prognosis'.

All researchers involved in projects in the broad area of African Health were invited to attend this conference. The intention was to bring together those who require mathematical modelling in their work and those who are mathematical modellers in order to foster collaborations.

Dr. Showa visit



Dr Sarudzai Portia Showa visited Prof. Farai Nyabadza from the 28th of October to 1st of November 2019 using her 2018 Kovalevskiaia Research Grant.

The visit was intended for discussing Dr Showa's research progress after her PhD and the possibilities of pursuing post-doctoral studies at the University of Johannesburg.

2019 MASI AND RESEARCH WORKSHOPS

The 2019 Masamu Advanced Study Institute (MASI) and Workshops in Mathematical Sciences will be held November 22 - December 1, in conjunction with the 2019 Southern Africa Mathematical Sciences Association (SAMSA) Annual Conference in Blantyre, Malawi.

Application to the institute and research workshop is now closed. Research Areas to be covered during the 2019 MASI include: Analysis, Biostatistics, Graph Theory, and Mathematical Biology.



MASI and Research Workshops is a component of the SAMSA Masamu Program that provides a platform for international research collaboration. The target audiences of the MASI are graduate and undergraduate students and early career faculty (rank less than associate professor) while research workshops are open to students, faculty, and other researchers in the mathematical sciences. The Masamu Program is administered by the Office of Special Projects and Initiatives at Auburn University in collaboration with SAMSA Executive Committee. MASI and Research Workshops are funded by participating universities through various funding sources including the US National Science Foundation (NSF) and Simons Foundation.

The tenth annual MASI and Research Workshop will be held in Maputo, Mozambique in 2020.

OTHER NEWS

- Dr Faraimunashe Chirove has joined the Department of Mathematics and Applied Mathematics of the University of Johannesburg as a Senior Lecturer after serving for 8 years at the University of KwaZulu-Natal. SAMSA members are advised that his new official email address is fchirove@uj.ac.za
- Dr. Christina Edholm has transitioned from post-doc position at University of Tennessee under Professor Suzanne Lenhart to Assistant Professor position at Scripps College in California effective Fall 2019.
- Dr. Katherine Perry has also transitioned from post-doc position at University of Denver in Colorado under Professor Paul Horn to Assistant Professor position at Soka University of America in California effective Fall 2019.
- Dr. Hannah Correia recently earned her PhD from Auburn University under the direction of Professor F. Stephen Dobson and is now a Harvard Data Science Initiative Postdoctoral Fellow at the Harvard TH Chan School of Public Health in Massachusetts.
- Dr. Janet Osaye, who recently earned her Ph.D. at the University of Johannesburg under the direction of Professor Peter Dankelmann, is spending the 2019-2020 academic year as a post-doc in mathematics at Auburn University. Janet was a participant in three Masamu workshops, 2016-2018.
- As a result of contacts initiated at the 2015 SAMSA-Masamu program in Windhoek, Namibia, Professor Sheng Bau visited Auburn University August-December, 2018. During his stay he and Prof. Peter Johnson produced 3 research papers (one of them with a third co-author), all of which are currently under review.



SAMS 2019 CONFERENCE : 2-4 December UNIVERSITY OF CAPE TOWN, SOUTH AFRICA

The 62nd Annual Congress of the South African Mathematical Society will be hosted by the Department of Mathematics and Applied Mathematics at the University of Cape Town during the period 2-4 December 2019.

[Click here to read more](#)



INTERNATIONAL CONFERENCE ON SCIENCE AND DEVELOPMENT : 20-22 February 2020, ELEPHANT HILLS HOTEL, VICTORIA FALLS, ZIMBABWE

Great Zimbabwe University will host an international conference on Science and development with the theme “Catalysing science innovations to accelerate development”. The conference is dedicated to the advancement of scientific, practical and policy-oriented approaches in tackling regional challenges on agriculture, environmental science, climate change, ICT, forecasting and modelling, biodiversity conservation, water and sanitation, energy resources and development.

[Click here to read more](#)



International Science Programme

First Announcement

THE 4TH EAUMP CONFERENCE 20th - 22nd August, 2020 AND THE 5TH NETWORK RESEARCH GROUPS MEETING IN MATHEMATICS 17th - 19th August, 2020 Venue: The Ngurdoto Mountain Lodge, Arusha, Tanzania

THEME

Strengthening collaborative and sustainable relevant research in Pure and Applied Mathematics, and Mathematical Statistics.

The Eastern Africa Universities Mathematics Programme (EAUMP) in collaboration with the International Science Programme (ISP) and Sida Bilateral programme of Sweden is organizing the 4th EAUMP International conference to be hosted by the Department of Mathematics, University of Dar es Salaam (UDSM). The Conference will be held in the tourist city of Arusha, Tanzania from 20th – 22nd August, 2020 at [The Ngurdoto Mountain Lodge](#). The audience will comprise of PhD students, postdoc, senior and junior academic researchers in Mathematics from the Eastern Africa region, the rest of Africa and the world.

The Network Research Meetings is another initiative established in recent years by ISP and the Sida Bilateral Mathematics Projects to promote research in the region. The first and second network research meetings took place in Sweden in March 2016 and February 2017 respectively, at Sida Headquarters. The third network research meeting took place in Entebbe, Uganda in August, 2018 and the fourth network meeting took place in Ethiopia in August, 2019.

The fifth Network meeting will also take place at [the Ngurdoto Mountain Lodge](#) from 17th – 19th August 2020.

The aim of the 5th Network meeting is to encourage collaborative research through regional research groups. It is anticipated that the participants will be mainly be from Uganda, Tanzania, Kenya, Rwanda, Ethiopia, Mozambique, Zambia, West Africa, as well as some European countries. The participants will comprise of ISP and Sida supported PhD students and Postdoctoral fellows, supervisors and mentors, senior researchers in mathematic. Other researchers interested to join the groups are welcomed.

GOALS OF THE CONFERENCE AND NETWORK GROUPS MEETING

- Promote regional and international collaboration in training, research and outreach.
- Provide a forum for interaction of African Mathematicians and others from outside Africa in the view of sharing experiences in mathematics training, research and dissemination activities.

PARTICIPATION FOR THE NETWORK RESEARCH GROUPS MEETING

It is intended that the 5th Network Groups Meeting will be comprising of members who are already established in their respective groups or areas of specialization; new potential members are advised to apply.

CONFERENCE TOPICS

Research Papers and Poster presentations are expected in the following areas though not limited to:

- | | | |
|---|-------------------------------------|---------------------------|
| • Algebra | • Mathematical Biology | • Fluid Dynamics |
| • Analysis (Real, Complex and Functional) | • ODE's, PDE's and Inverse Problems | • Operations Research |
| • Topology and Geometry | • Financial/Insurance Mathematics | • Numerical Analysis |
| • Dynamical Systems | • Combinatorics | • Mathematical Statistics |
| | | • Mathematics Education |

Invited speakers

EAUMP Conference

- To be announced

Network Meeting

- To be announced

Local organizing committee

- Dr. Sylvester Rugeihyamu, University of Dar es Salaam (UDSM), Tanzania (Chair)
- Dr. David Koloseni, UDSM (Secretary)
- Prof. Eunice Mureithi, UDSM (Head of Dept)
- Prof. Allen Mushi, UDSM
- Dr. James Makungu, UDSM
- Dr. Shaban Nymvua, UDSM
- Dr. Theresia Marjani, UDSM
- Dr. Eabert Mujuni, UDSM
- Dr. Herieth Rwezaura, UDSM
- Prof. John M. Mango, Makerere University, Uganda

Scientific committee

- Dr. Martin Singull, Linköping University, Sweden (Chair)
- Dr. Adalisalem Abathun, Addis Ababa University, Ethiopia
- Dr. Juma Kasazi, Makerere University, Uganda
- Prof. João Paulo Munembe, Eduardo Mondlane University, Mozambique
- Prof. Allen Mushi, University of Dar es Salaam, Tanzania
- Dr. Betty K. Nannyonga, Makerere University, Uganda
- Dr. Japhet Niyobuhungiro, University of Rwanda, Rwanda
- Dr. Fanja Rakotonirajao, University of Antananarivo, Madagascar
- Dr. Layla Sorkatti, University of Khartoum, Sudan
- Dr. Isaac D. Tembo, University of Zambia, Zambia
- Prof. Hamidou Toure, University of Ouagadougou, Burkina Faso
- Prof. Patrick Weke, University of Nairobi, Kenya

Finance committee

- Prof. Bengt Öve Turesson, ISP, Uppsala University and Linköping University, Sweden (Chair)
- Prof. Leif Abrahamson, ISP, Uppsala University, Sweden
- Prof. John M. Mango, Makerere University, Uganda
- Dr. Sylvester Rugeihyamu, University of Dar es Salaam
- Prof. Eunice Mureithi, University of Dar es Salaam