African Mathematical Union Commission for African Women in Mathematics (AMU-CAWM)

BACKGROUND

The Commission of African Women in Mathematics, AMU-CAWM, is one of the Commissions of African Mathematical Union. It was established 1986 to serve under AMU.

HOSTING OF W-PACOM 2021:

The African Mathematical Union Commission for Women in Mathematics in Africa (AMU-CAWM) and the African Women in Mathematics Association (AWMA) are jointly organizing a one-day W-PACOM 2021 Satellite conference to be held in Brazzaville, Congo, on 31 July, 2021. This conference will be held in the framework of the 10th Pan African Congress of Mathematicians (PACOM 2021) which is planned to take place in Brazzaville, Congo from 2 to 7 August 2021. The theme of W-PACOM 2021 conference will be The Role of Africa Women in Mathematics in Socioeconomic Development of Africa.

MEMBERS SERVING AMU-CAWM: 2017-2021

In 2017, the following were nominated to serve as members of AMU-CAWM Commission for the period 2017-2021:

- Eunice Mureithi: Chairperson (Tanzania, East Africa)
- Fadipe-Joseph Olubunmi: Co-Chair (Nigeria, West Africa)
- Noha El Khattabi: Secretary (Morocco, North Africa)
- Jojo Zingiswa: Member (South Africa)
- Yirgalem Tsegaye: Member (Ethiopia, North East Africa)
- Kgomotso Garegae: Member (Botswana, Southern Africa)
- Ancille Ngendakumana: Member (Burundi, East Africa)

MAIN OBJECTIVES OF AMU-CAWM

The main objectives of AMU-CAWM are:

- To encourage and empower girls and women to study, and to have active careers in mathematical sciences.
- To promote equal opportunities and equal treatment for girls and women in the mathematical sciences.
- To organize seminars, workshops, symposia, meetings, to discuss, analyze and find solutions to the problems confronting Women in Mathematics in Africa.
- To hold parallel conferences with major conferences/schools in Africa, such as PACOM, SAMSA, CIMPA Research schools, etc.
- Support female researchers to attend conferences and workshops and related research and training programs
- To cooperate with other organizations all over the world with similar objectives.
- To encourage establishment of associations of women in mathematics in every region or country in Africa, where they do not yet exist.
- To disseminate information for scholarships for girls/women and grants for doctoral and post-doctoral positions.
- To invite the various African associations for women in mathematics to be affiliated to the AMU and to be partners of the AMU-CAWM.

ACTIVITIES OF AMU-CAWM

The AMU-CAWM has been involved in a number of activities, in line with its objectives, over many years.

SOME NOTABLE ACTIVITIES FOR THE PERIOD 2017-2020 ARE:

 In July 2017, a W-PACOM satellite conference was held in Rabat Morocco during the 9th PACOM 2017. The year 2017 is a remarkable year for African Women in Mathematics in that

- Prof. Nouzha El Yacoubi was elected as the first female President of AMU.
- AMU-CAWM Hosted the STI-MATH International Workshop on 22-23 November 2018 at Palapye, Botswana. The theme of the workshop was the role of African women in mathematics in addressing challenges in STI in Africa. This workshop was organized parallel to the SAMSA Conference that took place from 19-22 November 2018 at Palapye, Botswana.
- In June, 2019, the South African Women in Mathematical Sciences Association (SAWMSA) was launched in Pretoria, South Africa. The Launch took place during the workshop whose theme was: Harnessing the Leadership and Agency of Women in the Field for the Transformation Agenda. Prof. Zingiswa Jojo was elected to serve in the interim as the president of SAWMSA.
- 2-5 July, 2019, African Women in Mathematics Conference, Stellenbosch University, South Africa: Theme: Women in Mathematical Communities.

ACTIVITIES THAT TOOK PLACE IN 2020:

Most activities planned for 2020 have been greatly affected lockdown due by COVID-19. A few activities however took place. These were as follows

- a) South Africa Women in Mathematical Sciences (SAWMSA):
- On the 11th February 2020, the International day of Women and Girls in Science was observed with 208 grade 8 girls of Bona Lesedi Secondary school in Mamelodi Township and 164 Pretoria Central High School situated in the Tshwane district respectively. In those schools, grade 8 girl children were given mathematics problem solving activities to do, addressed on how to use mathematics to reach to the stars in their future, and how to overcome challenges in their mathematics journey.

- Motivational talks were held with girls in rural schools of the Alfred Nzo district in the week 10th -14th March 2020. The topic was 'Bright in the corner where you are'. The content of the motivation covered how girls' excellence in mathematics can assist them to make their mark in their communities and secure a bright future.
- SAWMSA explored the working together with the Department of Higher Education and SAWMSA to drive Girl Learner Intervention Programmes in STEM across South Africa. The meeting was held at the DBE office on 28th February 2020. SAWMSA president, Prof Zingiswa Jojo was therefore invited to present on the National Mathematics Indaba on 19th -20th March 2020 (Did not materialize because of Covid-19).

(b) Tanzanian Women in Mathematics (TWM):

- •TWM organized talks on local radio and TV May 12 to motivate girls.
- •TWM hosted their first mathematics workshop on 12-13 November, 2020, at the University of Dar es Salaam, Tanzania. The theme of the workshop was Promoting Visibility and Participation of Tanzanian Women in Mathematics, for Industrial Development. The workshop brought together over 67 women in mathematics. Various talks were presented. The Chairperson Prof. Eunice Mureithi delivered the keynote address.

(c) Nigerian Women in Mathematics:

- •Contributed to the newsletter written in April 2020 on what COVID-19 crisis has meant for lives of women in Mathematics. It is available on the webpage of Committee for Women in Mathematics (CWM) Newsletter, Issue 4, Nov. 2020.
- An article on the impact of COVID-19 on Higher Education in Africa: Excerpts of Experiences of Women in

Mathematics by Marie-Francoise Ouedraogo, Sibusiso Moyo, Fadipe-Joseph Olubunmi, Entisar Alrasheed and Selma Negzaoni was submitted to the Newsletter of European Women in Mathematics.

ACTIVITIES FOR 2018 AND 2019

Below are some of the activities that took place during 2018-2019:

- 17-18 June, 2019: The 2nd Biennial Conference of the Nigeria Women in Mathematics organized by Nigerian Women in Mathematics (NWM) at the University of Nigeria, Abuja: Theme: Mathematical Sciences and security challenges for women and children.
- 11 February 2019: As part of the International day of Women and Girls in Science at UNISA in South Africa, a motivational talk session for grade 10-12 female students from two schools in Pretoria. It was Organized by SAWMSA women, Prof Zingiswa Jojo and Dr Masilo Motshidisi. The theme of the session was 'Investing in Women and Girls in Mathematics & Science for a defined future.' The sessions were aimed at encouraging and motivating girls in secondary schools to study mathematics and science very hard such that they can be able to venture to careers in the mathematical sciences.
- 6-7 June 2019: South African Women in Mathematical Sciences Association (SAWMSA) was successfully launched at UNISA, in Pretoria on the 06th and 07th June 2019. Prof Eunice Mureithi officially declared the association into existence. Various activities took place during the launch whose theme was: Harnessing the Leadership and Agency of Women in the Field for the Transformation Agenda. Prof. Zingiswa Jojo was elected to serve in the interim as the president of SAWMSA.
- 6-17 May, 2019: As part of Celebration of the International Day of Women in Mathematics (12 May) a school was

organized with the theme New trends of Mathematical Methods in Physics at Dangbo in Benin Republic. The school was supported by African Centre of Excellence in Mathematical Sciences and Applications, Benin.

 17-18 June, 2019: The 2nd Biennial Conference of the Nigeria Women in Mathematics organized by Nigerian Women in Mathematics (NWM) at the University of Nigeria, Abuja: Theme: Mathematical Sciences and security challenges for women and children.

NOTABLE ACTIVITIES PRIOR 2017

Some notable activities before 2017 include:

- the symposium for African Women in Mathematics that was held in Nigeria in 1990;
- the 2008 one-day workshop for African Women in Mathematics, in Maputo, Mozambique, supported by African Mathematics Millennium Science Initiative (AMMSI),
- a two-day workshop supported by CIMPA held Ougadougou, Burkina Faso in 2012
- CIMPA supported workshop in South Africa in 2013.

Prepared by Prof. E. Mureithi Chairperson of AMU-CAWM