

## **Reporting on the 8th International Conference on Mathematics and Mathematics Education**

**Conference Theme: Mathematics for Social Impact**

**Date: May 22-23, 2025**

**Venue: Multi-purpose hall at old main campus**

The 8th International Conference on Mathematics and Mathematics Education (ICMME-2025) organized by the Department of Mathematics, Dilla University, in collaboration with the Ethiopian Mathematics Professionals Association (EMPA) was held on May 22-23, 2025, under the theme “Mathematics for Social Impact”. The main aim of this conference was to facilitate the presentation platforms of Mathematics and Mathematics Education for global scientists, researchers, and educators. The deliberations of the conference include the invited keynote speakers, eminent professors from Addis Ababa and Jimma Universities, as well as plenary talks from Rowan University, USA and Dresden University of Technology, Germany. Researchers in pure and applied Mathematics as well as mathematics education were invited to participate in the conference. The conference convened more than 300 participants from different Ethiopian Universities, the MoE STEAM Desk representative, sponsors of the conference, high school teachers, Olympiad Mathematics students gathered from different Ethiopian high schools, Dilla University directors, deans, faculty members, and invited stakeholders. The conference began with entertaining participants by the Dilla University cultural music band.

In his welcoming address, Habtamu Temesgen (Ph.D., Assoc. Prof.), Vice President for Research and Technology Transfer, emphasized the significance of the mathematics conference for knowledge exchange, practical research application, and strengthening partnerships among institutions. In addition, Samuel Asefa (Ph.D., Assoc. Prof.), President of the Ethiopian Mathematics Professionals Association, addressed his welcome speech by underlining that this conference celebrates Ethiopia's growing leadership in global Mathematics, from cutting-edge research to the start of Mathematical Olympiad excellence. In his opening remarks, Dilla University President, Elias Alemu (Ph.D.) emphasized the importance of the Mathematics and Mathematics Education Conference as an opportunity for knowledge sharing and establishing partnerships with Ethiopian and international universities.



**Figure 1:** President of DU, President of EMPA and Vice President of DU

Following this, distinguished keynote speakers Prof. Mulugeta Atnaфу from Addis Ababa University on the title 'The Role of Mathematics Education in Enhancing Social Impact' and Prof. Chernet Tuge from Jimma University on the title 'Social Impact of Mathematics' made their interesting keynote speeches. The plenary talks by Prof. Abdulkadir Hassen entitled 'Research in Mathematics Education: Mathematics in Ethiopia' from Rowan University, USA, and Johannes Assefa entitled 'Financial Mathematics (Polynomial Processes and their Applications to Stochastic Modeling)' from Dresden University of Technology, Germany excited the participants of the conference. All the keynote speakers and plenary talkers delivered impactful discourses that Mathematics is applicable in the real world. Different questions and insightful ideas were raised by the participants, and fruitful discussions were held to enrich the event of the conference.



**Figure 2:** Keynote speakers and plenary talkers.

The morning session of the first day concluded with the conference lunch. After the plenary session, participants of the conference were grouped into four parallel sessions in the afternoon in which different researchers in person and online have presented their research findings in different lecture halls. At the same time, the 2nd National Mathematical Olympiad stage 2 screening took place on March 8 Hall. The first day of the conference is closed after the parallel sessions and the 2nd National Mathematical Olympiad competition.

The second day of the conference was continued the next day, Friday, at the multipurpose hall of the old campus during which Ephraim Teketel (grade 10 student) from Saint Anthony Primary and Secondary School, Shinshicho, Ethiopia presented his research finding entitled ‘On the gaps of numerical semigroups generated by two consecutive odd natural numbers’ and Dr. Nega Arega from Namibia University of Science and Technology, Namibia, presented his research findings on the area of algebra.





**Figure 3:** Eferem Teketel, Grade 10 student, with his father.

Following this, the STEM Power Director General, Simenew Keskes (Ph.D.), presented the aims of STEM Power. Next, the 2nd National Mathematical Olympiad winners award ceremony took place. The top ten high school delegate students from various Ethiopian universities were awarded the 2nd National Mathematical Olympiad. The top three (1 – 3 ranked) students awarded Laptop computers donated from STEM Power, from 4 to 7 ranked students awarded tablet and from 8 to 10 ranked students awarded smart phone donated from sponsors of Mathematical Olympiad. Lastly, the general assembly of EMPA took place. In this assembly, evaluation of the 2017 E.C. annual performance report was presented by Dr. Yenealem, and issues related to annual EMPA membership payment (the annual membership payment is increased from 600 Birr to 1,200 Birr for existing members and from 700 Birr to 1,400 Birr for new members) were presented by Dr. Samuel. The general assembly endorsed the amended annual membership payment. The general assembly exhaustively evaluated and approved the EMPA draft guideline on payment rates covered only by the association budget and annual plan for 2018 E.C. Following this, the certification ceremony was conducted. The second day of conference events in the multipurpose hall concluded with the announcement of Wollo University as the organizer of the upcoming International Mathematics Conference. Following lunch, the conference participants toured the Gedeo cultural landscape, a UNESCO World Heritage Site.





**Figure 4:** Photo of conference participants visiting Gedeo cultural landscape.

The overall event of the 8th International Conference on Mathematics and Mathematics Education concluded with a special dinner.

This conference has provided the host university with opportunities to promote international and national collaborations, enhance its image, and demonstrate its capability in organizing such academic gatherings in Mathematics. These events have brought together the international and national mathematics community, allowing participants from diverse fields to share their best practices and disseminate their research findings.