Caucasian Mathematics Conference CMC I
Tbilisi, Georgia, September 5 and 6, 2014

FINAL REPORT

PREHISTORY. During the meeting of presidents of mathematical societies of Europe in Aarchus on April 6, 2013 the President of Turkish Mathematical Society (TMS) Betül Tanbay suggested to launch the Caucasian Mathematical Conference (CMC). Her idea was to bring together mathematicians from Caucasian and neighboring countries, i.e. Armenia, Azerbaijan, Georgia, Iran, Russia and Turkey.

This suggestion was supported by the President of the European Mathematical Society (EMS) Marta Sanz-Solé., the representative of the Moscow Mathematical Society (MMS) and EMS Armen Sergeev and the President of the Georgian Mathematical Union (GMU) Roland Duduchava. After preliminary discussions it was decided that the best place for the first meeting would be the capital of Georgia Tbilisi, and the best time for it is September 2014. All mathematical societies of Caucasian and neighboring countries, namely, Armenia, Azerbaijan, Georgia, Iran, Russia and Turkey, were invited to take part in the organization of the meeting. The EMS awarded financial support and gave the Conference its logo.

In January 2014 the Turkish Mathematical Society invited the representatives of all involved societies to come to Istanbul to discuss the details of CMC I. It turned out that only representatives of Georgia, Russia and Turkey were able to come. At the meeting, which took place on January 11, 2014 the precise dates of CMC were fixed on September 5 and 6, 2014. It was suggested to appoint the Steering Committee of CMC conferences and ask the participating societies to propose their representatives to this Committee. Following their suggestions and consultations with EMS, the final list of members of Steering Committee was approved by EMS and participating societies. It consists of:

1. Marta Sanz-Solé (ex officio; EMS president),
2. Carles Casacuberta (ex officio; Chair of the EMS Committee for European Solidarity),
3. Mohammed Ali Dehghan (Iran),
4. Roland Duduchava (Georgia),
5. Tigran Harutyunyan (Armenia),
6. Misir Mardanov (Azerbaijan),
7. Armen Sergeev (Russia and EMS),
8. Betül Tanbay (Turkey).

It was suggested to appoint one prominent (on the level of invited speakers at international mathematical congresses) and two young (under 40) mathematicians from each participating country as invited speakers. Later the EMS suggested an additional invited speaker from EMS.

Roland Duduchava was approved as the Chairman of the Local Organizing Committee and suggested the list of members of the Local Organizing Committee, approved by the Steering Committee: Buchukuri Tengiz, Davitashvili Tinatin (Scientific secretary), Duduchava Roland (Chairman), Eliashvili Merab, Natroshvili David (Vice Chairman), Sigua Levan.
The conference fee was set to 20 USD. The Steering Committee has also asked EMS to support financially the invited speakers.

**PREPARATION.** After discussions with member societies and EMS the Steering Committee has approved the following list of invited speakers:

2. Mohhamad Sal Moslehian, Ferdowsi University of Mashhad.
3. Garib N. Murshudov, MRC Laboratory of Molecular Biology, Cambridge.
4. Dmitri Orlov (Steklov Institute, Moscow).
5. Samson Shatashvili (Trinity College, Dublin).
6. Leon Takhtajan, University of Stony Brook.
7. Cem Yalçin Yildirim (Bogaziçi University, Istanbul).

The member societies have also proposed the following list of 12 young invited speakers (under 40); Amini Harandi Alireza (Iran), Bandaliyev Rovshan (Azerbaijan), Beloshapka Iulia (Russia), Buyukboduk Kazim (Turkey), Gorchinsky Sergey (Russia), Huseyni Ali (Azerbaijan), Kobelyan Artur (Armenia), Soleimani-Damaneh Majhid (Iran), Tepnadze George (Georgia), Tepoyan Vardan (Armenia), Tsaava Medea (Georgia), Ozgun Unlu (Turkey).

At the end of March the First Announcement was sent to all tentative participants and the Conference WEB was launched:

www.euro-math-soc.eu/cmc/ (main WEB)  www.gmu.ge/cmc (mirror)

Simultaneously, the Local Organizing Committee has started the registration of tentative participants online and by mail.

Later the Second and Final Announcements of CMC, containing all necessary information for participants, were disseminated.

The Turkish Mathematical Society has designed a beautiful Conference logo widely used during the preparation of the Conference and during its work.

More than 160 abstracts were submitted to the Organizing Committee. They were edited and prepared for print by Georgian Mathematical Union (GMU). The Conference poster and program were also compiled by GMU and printed by the Georgian National Academy of Sciences.

**FUNDING:** The Georgian Mathematical Union, supported by the Georgian National Academy of Sciences and Ivane Javakhishvili State University, applied for the Conference grant to the Shota Rustaveli Science Foundation, but did not get it. This unmotivated decision has demonstrated that the Foundation undervalued the importance and level of CMC. Needless to say, what a heavy blow it was for the organizers. At this point GMU has launched an intensive campaign against this unfair decision, including discussions on TV. It has also addressed many private and state organizations asking for the financial support of the Conference. These efforts had achieved their goal only a few days before the opening of the Conference: on September 2 the Georgian Ministry of Education and Science has allocated 25,000 GEL (approximately 14,350 USD) to CMC which was a very essential help to the Conference together with 4900 Euros, allocated by European Mathematical Society, the inner resources of GMU and money collected from the Conference fees.

**PARTICIPATION:** The Organizing Committee of the Conference has registered 285 applications for the participation in CMC I. However, only 139 of these applicants were able to attend the Conference: 9 from Armenia, 7 from Azerbaijan, 66 from Georgia, 23 from Iran, 7 from Russia, 15 from Turkey and 12 from other countries.

Such a big difference between the number of applicants and participants of CMC is due to the new visa regulations, announced by the Georgian Government just 10 days before the Conference. Initially 99 Iranians had applied for CMC but only 23 of them were able to get new visas and come to Tbilisi. Among those who could not come was
the invited speaker Mohammed Sal Moslehian (see Final Statistics of CMC for more details).

**CONFERENCE:** CMC I has opened on September 5, at 9.30, in the Conference Hall of the Georgian National Academy of Sciences (GNAS). The Conference was greeted by the Deputy Minister of Education of Georgia Giorgi Sharvashidze. Armen Sergeev has read a welcome address by the President of EMS Marta Sanz-Solé. Betül Tanbay, Roland Duduchava, representatives of Azerbaijani and Armenian mathematical Societies have welcomed the participants of the Conference. The Opening Ceremony was attended by 120 participants and several TV journalists, who had interviewed R. Duduchava, B. Tanbay and G. Sharvashidze.

After the Opening Ceremony the scientific program of the Conference started with the first three 50-minute invited lectures which were delivered by Samson Shatrashvili, Cem Yelchin Yildirim and Garib Murshudov. In the afternoon there were organized 11 parallel sessions at the Ivane Javakhishvili State University (JSU). Six invited young mathematicians gave their 30-minute lectures among other speakers.

The next day, September 6, the two other 50-minute invited lectures were delivered by Leon Takhtajan and Dmitry Orlov at GNAS. The morning session has finished with the Closing Ceremony.

In the afternoon the conference concluded its work with the talks given in 10 parallel sessions at JSU where also another five invited young mathematicians gave their 30-minute lectures.

The two invited speakers and one young invited speaker could not attend the Conference. The reasons for that were the health problem (in case of M. Esteban, EMS) and visa problems (in case of M. Moslehian and M. Soleimani-Damaneh, Iran).

Apart from 5 Invited 50-minute lectures and 11 invited 30-minute lectures by young mathematicians, the 95 contributed 30-minute talks in different fields of pure and applied mathematics were delivered during the Conference.

**NEXT CMC:** Shortly before the Closing Ceremony of CMC the members of the Steering Committee Betül Tanbay, Armen Sergeev, Roland Duduchava together with Alice Fialowsky (member of the executive Committee of EMS), Misir Mardanov (representative of Azerbaijan Mathematical Society) and Levon Gevorgyan (representative of Armenian Mathematical Society) met together to discuss the plans for the next meeting (unfortunately, the representative of Iranian Mathematical Society did not take part in the meeting).

At the meeting it was decided to:

1. Organize the next CMC II in Turkey in 2015 during the third decade of August. The place and venue of CMC II will be announced later by the Turkish Mathematical Society.
2. Keep the format of CMC conferences with one extra proposal: to add the poster sessions to the format of the conferences if the number of contributed talks will exceed 80.
3. Raise the conference fee to 30 USD.

**SATELITE CONFERENCE IN BATUMI:** After one day break (on September 7), used for the transfer of participants to Batumi, the Satellite V International Conference of the Georgian Mathematical Union started in Batumi (on September 8). During the next four working days of the V GMU Conference 16 invited 50-minute lectures were delivered, in particular by four CMC invited speakers (Orlov, Shatatshvili, Takhtajan, Yildirim) and distinguished mathematicians from Georgia and abroad. 90 contributed 30-minute talks were delivered in parallel sessions.

The Satellite Conference was closed on September 12 in the late afternoon.

Roland Duduchava  
Chairman of CMC I Organizing Committee  
22.09.2014, Tbilisi, Georgia