

**Report on the
Second International Conference of Mathematics
and its Applications
University of Basrah (Iraq)
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<http://www.basconmath.org/>**

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The first Conference *International Conference of Mathematics and its Applications* was held in Al-Qadisyah University, 21-23 October 2012. Several foreign mathematicians were invited and only one attended the Conference in 2012. It seems that there is no website of this first conference.

The second conference was organized by the Minister of Higher Education and Scientific Research of Iraq, the University of Basra, the Department of Mathematics of the College of Science and of Education for Pure Sciences.

- **Organization of the Conference:** Five committees were in charge of different aspects of the conference.

Both of us were members of the International Advisory Board of this conference, the head of which was Prof.Dr. Abid Ali H. Al Taai. We were invited by Ahmed Zainy who was not in Basra to attend the conference.

The role of our committee was formal.

If globally, the conference was very well organized, the website was not up to date in the few days before the conference. In particular, a tentative program was included only two days before the beginning of the conference; the actual program was somewhat different.

Altogether, we were only 5 foreign participants (including Jorge Jimenez Urroz, who represented the CIMPA). It is a pity that not all of us could give a lecture. Finally, only three over five could give a plenary lecture. All other participants (around 100) came from different universities of Iraq, but none from Kurdistan.

In the paper specifications, it is mentioned "*the paper should be using word 2003-2010 ...*". There exists a language specifically for mathematicians, called \LaTeX and essentially all professional mathematicians in the world write their papers using \LaTeX . It is impossible to submit a research paper which is not written using \LaTeX to most of international journal of mathematics. So, we recommend to organize in every department of mathematics a crash training introducing \LaTeX

(2 or 3 hours are enough). Every mathematician has to use L^AT_EX.

In each session, the chairman has to introduce the speaker, to make respect the duration of the lecture, to coordinate the questions.

Before the end of the conference, we organized an informal meeting with young students and teachers in order to discuss about any subjects related to mathematics. About twenty participants attended this meeting. The main remark is about documentation. They have access to very few documents and they have difficulties to look for scientific information. We gave them several possibilities:

- Anders Wandahl, a member of the Committee for Developing Country of the European Mathematical Society, has run workshops on electronic access.
<http://euro-math-soc.eu/EMS-CDC/activities.php>
- Bordeauxtheque can provide any paper on request.
http://bordeauxtheque.math.u-bordeaux1.fr/bxtq_index_english.html
- Zentralblatt is a database for mathematicians.
<http://www.zentralblatt-math.org/msc/en/>
- Elsevier gave free access to many journal up to 2008.
<http://www.elsevier.com/physical-sciences/mathematics/archived-articles>

Moreover, we explained that the International Congress of Mathematics is the most important meeting in mathematics. It is held every four years, the next one in Korea in August 2014. More than 5000 mathematicians will attend it. Many workshops will be organized covering all the active domains of research in mathematics and its applications. We recommend to look at carefully these domains and their content. This gives a good picture of the topics of mathematics where research is currently active.

- Besides four plenary lectures, the other lectures in parallel took place in five different rooms. Some 80 talks of 20' were listed on the leaflet which was distributed (and which is on the web site), but the total number of the lectures which were delivered is less. Among them, there were (too) many lectures dealing with fuzzy mathematics.

Often, the speakers believed that research in mathematics amounts to introduce some new definition (in topology, in algebra, or other basic subjects) and to investigate easy consequences of this definition, without being concerned by the relevance with any other part of mathematics. In such lectures, no important tool or theorem was used, only elementary obvious arguments. It seems that most PhD theses are on such a model. However, we also attended some lectures of higher level. Unfortunately, some of them were canceled and we could not discuss with the author.

For the young participants, to attend lectures by foreign mathematicians and to see what is mathematical research is something new and surprising. Allowing them to open their mind by international contacts is a new experience which may have lasting consequences. To organize workshops in Basrah in a similar way as what is done in Erbil is to be considered. The safety conditions in Basrah are good enough for that.

- In the first conference, we had several meetings, the subject of which was the creation of an Iraqi Mathematical Society. The role of such a Society would be important to promote mathematics in the country and to involve Iraqi mathematicians in the international community. The French mathematical Society was created in 1872 and it contributes to make France one of the best country in mathematics.

Moreover, such a Society could be part of a regional Mathematical Society as it exists in Europe, in Latin America, in South East Asia, in Africa.

During this second conference, nobody mentioned this topic.

- The hospitality of our Iraqi colleagues is amazing. They took care of us as soon as we arrived at the border (by road coming from Koweit) and up to our departure from their country (by the same way). Their help with the immigration and emigration process was very useful. We have to thank more particularly Dr Hana M. Ali, her husband Dr Hatam Jassim and their sons, who took care of us from the first minutes to the last.
- On the web site of this second conference, six invited speakers were announced, none of them came. Four plenary speakers were announced, one of them did not come and was replaced; the four plenary lectures which were actually given were given by
 - Salim H. Al-Kutaibi on *Mathematics between culture and reality*
 - Abdul-Adheem M. Al-Soodinay on *Some algebraic structures on manifolds*
 - Michel Jambu on *Topological complexity; application to robotics*
 - Francesco Pappalardi on *Properties of reduction of groups of rational numbers: on Artin Gauss Conjecture*