## Report on 2<sup>nd</sup> International conference of mathematics and its applications 23-24 October, 2013, Bashra, Iraq

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## 1 Overall impression

The situation in Iraq in the past 30 years has been really difficult. And obviously this has an strong impact in the development of sciences in general, and mathematics in particular. It is admirable the effort that Iraqi mathematicias are done to bring the country at an international level. But it needs to continue the effort, and the clear help of the local government. I recommend to strength the link with foreign researchers and organizing the third international conference of mathematics and its applications. I would be very happy to be again a participant in those events.

The last day i was talking to prof. Raad S. Mahdi, Head of Department of Mathematics at Basra university, Radhi A. Zboon Head of Department of Mathematics, College of Sciences University of Al-mustansiriya, Baghdad-Iraq, Abdulsattar J. Ali, Head of Department of Mathematics, College of Education for Pure Sciences, and other colleagues, and they are willing to continue cooperation at international level. Maybe a cooperation with Fatima Aboud could broaden the action that by now CIMPA is doing in Kurdistan and organize one of the workshops in Bashra. During my visit there was not signal of danger, but a large military presence. Still the conditions of security should be totally guaranteed by the local organization.

Several possibilities of cooperation could be the stay of iraqi students abroad, participation in lectures and schools organized by CIMPA in neighbouring countries, organization of workshops in the line of those running at Salahadin university at Erbil, in the city of Bashra and in the near future other activities at international level like CIMPA schools.

## 2 Comments on the 2<sup>nd</sup> International conference of mathematics and its applications

My trip to Bashra was via Kuwait on the 22<sup>nd</sup>, and i reached the venue on October 23, at 2 pm together with Michel Waldschmidt. Even though the lunch was over, they prepared lunch for both of us while the first talk of the afternoon started.

The local organization of the conference is very good. Lunch is at the venue in the college of science of the University of Bashra and dinner at Manawi Basha hotel, (a good hotel with internet conection everywhere), where some foreign participants are located, among them myself. The hospitality of the comitee is a real pleasure. The people is very friendly and ready to help in any tiny detail that comes up, even when the need is simply shopping. The last day we enjoyed a remarkable trip to Shat Al-Arab, the continuation of the Eufrates and Tigris rivers to end in the arabic gulf.

The organization of the talks, and the program needs to be improved. Michel Waldscmidt and myself did not know whether we were going to talk, or not, until the very last moment. We did not talk, but nobody told us that this was going to be the case.

I wonder what was the role of the international advisory board and why there was not any international member in the scientific comitee.

The level of the talks, and the presentation needs strong improvement. In the talk, which might be more convenient presented by beamer and not word, it should be showed the result, the context, an idea of the proof with the main tools and tricks used for the proof. After the talk, the audience should get an idea of the importance, difficulty and beauty of the theorem presented. Why does a researcher do research?

The part that needs mostly to be modified is the turn of questions and comments. First, if the question and answer are done in Arabic, the international participants are lost. But this is an international conference. Second, and most important. There is no need to ask always a question. It is better not to ask, than entering in a discussion about notation.

I could assist to the talk of Michel Jambu and Francesco Pappalardi. The first was clearly motivating and opening new lines of research for the iraqi audience, emphasizing the link between topology and several aspects of applied mathematics. One of the reasons to do this job is the beauty of the results, but also the direct application of some of them to real life.

The talk of Francesco, more directed to pure mathematics, and in particular number theory showed a problem of actual research by the number theoretic community. But he was able to connect it to the most elementary problem as expressing an integer in decimal basis. In this way, the audience can start from the beggining and appreciate the place to locate the result. The audience will not get lost in the first minute, but still he does not stop in explaining trivial things.

I would suggest to keep contact with foreign researchers to open up the possibilities in research. It seems that many of the talks presented are in the direction of fuzzy mathematics. But mathematics has very many different directions. Why so much interest in the same branch?

The ministery of higher education should consider the possibility of supporting postdoctoral stays to consolidate the line of reasearch of the mathematicians in Iraq. I would also emphasize to consider, not only english speaking countries, but other european countries to go to follow postdoctoral or phd programs. In this sense France has been a common destination in the past and should be in the future, but it should also be considered other countries as Spain or Italy in which english programs are also conducted.

In this direction also consider the support of the organization of a CIMPA school that can create links between mathematics in Iraq and foreign countries. In this sense, in the city of Bashra there is still a large military presence and the safety of the participants should be totally guaranteed.