UNIVERSITÀ DEGLI



STUDI ROMA TRE

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## Erbil, Kurdistan (Iraq) Report on the visit by

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December 1 - 9, 2014

### 1 Preamble

This report can be downloaded at http://www.mat.uniroma3.it/users/pappa/missions/reports/2014\_Baghdad.pdf

### 2 The visit

I arrived in Erbil on December 1, 2014 at 3:45AM and I left Erbil on December 9, 2014 at 4:50AM. During my stay I was housed at the Guest House of *Salahaddin University* on Zanko St, approximately 20 minutes walk from the *College of Sciences of Salahaddin University* where I gave the lectures of my workshop.

The dates and topics of my lectures were:

- Monday December 1: Introductory talk (addressed to all member of the Mathematics Department)
- Tuesday December 2: Algorithmic Complexity
- Wednesday December 3: Discrete Logs and th Euclidean Algorithm
- Thursday December 4: Elliptic curves over finite fields 1
- Thursday December 4: Factoring integers and Producing primes (for undergraduate students)
- Sunday December 7: Elliptic curves over finite fields 2
- Monday December 8: Elliptic curves over finite fields 3

The local organization was efficiently taken care by Professor Herish Omer and the initial invitation and the connection with CIMPA was efficiently dealt with by Fatima Aboud.

The workshop was attended by around 20 participants and at least three came from outside Erbil.

My expenses were paid in part by CIMPA and in part by the French Embassy in Iraq.

The topics of the first three lectures we suitable for the audience and, in my opinion, well received.

### **3** Followups

Mathematicians at the Salahaddin University are eager to establish contacts with colleagues in foreign institutions.

With professor Parween Humadi, we discussed of the possibility of a joint supervision of a student at the doctoral level on a topic related with Elliptic curves and number Theory. I hope that this project will materialize.

During 2014, especially after my visit in Baghdad of April 2014, I tried to organize the acceptance of Iraqi students at a Doctoral program at the Università Roma Tre. The project reached an extremely advanced stage. Unfortunately, very recently, I discovered that Iraqi students with a fellowship from the **Iraq Minister of Higher Education** are allowed to bring their fellowship only to international institutions that are accredited with the Minister.

I wish that my University is added to the list of accredited University both in that of Iraq Minister of Higher Education and, if possible, in that of the Kurdistan Minister of Higher Education.

#### 4 Security issues

I received the invitation to deliver the workshop in March 2014. Later, in early Augost 2014, due to the deterioration of the safety conditions in Kurdistan, the organization of the workshop was suspended with the agreement that the final decision on its realization, would be delivered in late October 2014.

At the end of October the local organizers gave their Nulla Hosta to the organization. So the workshop took place as originally planned except for a shortening of its length to 8 days.

The information coming from the Kurdish colleagues was very different from the information circulated from the Italian official sources. For example in http://www.viaggiaresicuri.it/?iraq , on the 11.11.2014 bulletin, it was described a situation so potentially dangerous, that it was suggested not to make this trip. I decided to trust the Kurdish news and I went to Erbil.

During my entire stay I always felt safe in Erbil. So, my impression was quite positive on the safety of the city.

The day after my arrival, I called the Italian consulate in Erbil and Consul Carmelo Ficarra advised me that since June the atmosphere in Erbil had changed and that he suggested to be careful during my movements in Erbil avoiding Shopping Centers and in general, public places. He also kindly instructed me on how to transmit the data of my presence to the consulate office.

I partially followed the advise of Mr Ficarra but I cannot avoid to point out the differences between the recommendation from the Italian officials and the Kurdish one.

However, on one side, I can agree with the recommendation of "Avoiding unnecessary trips to Erbil". In fact, although it is a beautiful and fascinating city, it might not be the right time in history to have a large number of tourists visiting Erbil. But on the other side, the activities on which CIMPA is involved, for a variety of different reasons, often take place in countries where avoiding unnecessary trips might be a good idea. Finally, in my opinion, this visit in Kurdistan was very necessary and I am personally highly satisfied of its success.

### 5 Some Photos in chronological order



Entrance of College of Science



members of the Mathematics Department



above: Ahmed Ayoub, Rostam Karim Saeed, FP, Gashaw Aziz down: Nabil Arif, Herish Omer Abdullah, Mohammed Sabri

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Some of the participants in the workshop