

Report by Christian MAUDUIT on

CIMPA-UNESCO-MESR-MINECO Research School

MATHEMATICAL MODELS FOR SECURITY APPLICATIONS

29 august to 9 september 2016

Faculty of Mathematics and Computer Science

University of Havana, CUBA

This research school was concerning several aspects of algebra, codes, cryptography and their applications. It attracted 25 young mathematicians (amongst them 6 women) from Argentina (2 men), Brazil (1 woman), Colombia (2 men), Mexico (3 men), Venezuela (1 man and 1 woman), Spain (1 man) and Cuba (10 men and 4 women). Unfortunately 4 students from Mexico (1 man), Venezuela (1 man) and Spain (2 women) canceled their participation at the last moment.

The lectures were provided by 7 mathematicians coming from Australia (1 man), Cuba (1 man), Mexico (1 man) and Spain (4 men and 1 woman). Moreover, several participants gave a talk in order to present their research.

Most of the lecturers were used to attend all the sessions, which helped a lot the coherence and the global quality of the lectures delivered. The lectures I could attend convinced me of the very good preparation of the courses and the adequacy of the content and the level with the expectation of the students. This probably explain why the students attended all the lectures, asking questions, participating and, at the end learning a lot during this school. When I discussed with the students at the end of the school, several of them were thinking about postdoc or future collaboration with the lecturers they met during the school.

The University of Havana is very well located and constitutes a very interesting architectural ensemble. The Faculty of Mathematics and Computer Science provided an

excellent environment in spite of all the difficulties inherent to local situation. In particular the lectures were given in a very comfortable air-conditioned room, with all modern equipment and the participants could access easily and without fees to internet (which is not common in Cuba).

The foreign students and speakers were staying at hotel Vedado, located near from the University of Havana and providing breakfast and dinner. Moreover, the Cuban Society of Mathematics and Computer Science organized (with the financial support of CIMPA) lunches for all the participants in a restaurant located near from the university.

As a conclusion, this was a very interesting and successful research school and I would like to congratulate and to thank professors Valentina Badía Albanés, Josep Miret Biosca, Hebert Pérez-Rosés and all their cuban collaborators for the impressive work they did in the organization of this school. I would like also to have a thought for Mirka Miller, who was one of the initiators of this research school and who passed away on 2 January 2016.