CDC Grant -IMU

FINANCIAL AND ACADEMIC REPORT

Name of organizer: Martín Mombelli
Title of activity: QUANTUM 60 - Colloquium on Algebras and Representations
Location: Huerta Grande, Córdoba (Argentina) dates: December 10th - 14th, 2018

FINANCIAL REPORT

STATISTICS

<table>
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<tr>
<th>Nationality</th>
<th>no. Participants</th>
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<th>no. Posters</th>
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The participants stayed during the congress, from 10th to 14th, December 2018.

DEVELOPMENT ASPECTS

**Impact on local research and/or development activities:**

The meeting had 24 plenary lectures by important mathematicians from around the world and a poster session with contributions from 15 younger researchers. All of them have been attended by most of the participants.

In this opportunity, the meeting was in honour of Prof. Nicolás Andruskiewitsch 60th birthday, which motivated that many renowned mathematicians from Europe and the USA attended the colloquium. To name a few, we remark the attendance of Pavel Etingof (MIT, USA), Juan Cuadra (Almería, Spain), Francois Dumas (Clermont Ferrand, France), Michael Muger (Nijmegen, The Netherlands), Maria Ronco (Talca, Chile), Hans-Jurgen Schneider (Munich, Germany), Eric Rowell (Texas, USA), Nicolás Libedinsky (Santiago, Chile), Vladislav Kharchenko (DF, Mexico), Stefaan Caenepeel (Brussels, Belgium), Giovanna Carnovale (Padova, Italy), Istvan Heckenberger (Marburg, Germany), Victor Ostrik (Oregon, USA) and Ben Elias (Oregon, USA). This had a great impact on the researchers from South America in the congress, as they could meet and discuss their ideas and projects with mathematicians that do not usually visit our region. As well, the organizing committee for this conference was composed by Iván Angiono (UNC), Fernando Fantino (UNC), Gastón Andrés García (La Plata, Argentina), Agustín García Iglesias (UNC), Martín Mombelli (UNC) and Cristian Vay (UNC); all former students of Andruskiewitsch.

Without any doubt, the meeting fulfilled widely its goals. The lectures gave advanced, graduate and undergraduate students the opportunity to learn and familiarize with new contents in classical subjects in algebra as well as in diverse lines of research which are carried out by specialists.

The poster session gave the younger researchers the opportunity to present their results and discuss them with experienced researchers, which provided insight for them on how to continue their research work.

The relaxing and comfortable atmosphere during the meeting offered graduate and postdoc students their first contact with specific topics and allowed them to establish contact with professors with whom they could continue their career in the future. As a consequence, this produced an active interaction of the students with the invited national
and foreign researchers, as well as among researchers. This led to new incentives for joint work and new mathematic friendships.

**Links/networks initiated:**

In the last years the Argentinian National Science Foundation (CONICET) has put a lot of effort to attract Ph.D. students from Latin America to Argentinian Universities, by offering a good number of doctoral fellowships. Today, a third of the graduate students from FaMAF (Universidad Nacional de Córdoba) are from outside Argentina, a third from Argentina outside Córdoba and only a third from Córdoba. Some of these students working on algebra or related topics attended the conference, together with some postdocs from neighbouring countries such as Brazil, Uruguay, Colombia and Ecuador. They were exposed to the latest developments in the field and were able to exchange ideas with experienced researchers from abroad.

Another key point will be the publications of Proceedings, and we expect some collaborations between mathematicians in the colloquium to be published in them. To start with, the editorial board has been constituted with this spirit, and include Ivan Angiono (Argentina), Giovanna Carnovale (Italy) and Pavel Etingof (USA).

**COMMENTS AND CONCLUSIONS OF ORGANIZERS**

**General comments and conclusions:**

The Colloquium on Algebras and Representations Quantum 60 was held in Casa Serrana Hotel, Huerta Grande, Córdoba from December 10th to 14th, 2018.

The structure of the congress was developed by an organizing committee from the Universities of Cordoba and La Plata, all former students of Andruskiewitsch. The scientific program was in charge of a scientific committee with members from different countries, namely Argentina (Andrea Solotar), Brazil (Vyacheslav Futorny), Chile (M. Ofelia Ronco) and Germany (Hans-Jürgen Schneider).

There were 24 lectures, in which current problems and recent advances in different topics in algebra and related areas were presented. Most of them were given using electronic support. In the meeting's web page, such presentations will also available for download.

The School was attended by 72 participants, all of whom were hosted at Casa Serrana Hotel. This ensured every day lunch and dinner was shared by all participants in the same place where the academic activity was carried out; that allowed to create a very suitable space for participants to meet and have the opportunity to talk and discuss about mathematics as well as to know each other. With the obtained funding, the School
covered the lodging expenses of almost all students and most participants. All that was possible thank to the support received from international, national and local institutions.

The overall conclusion is that the meeting runned as planned, and it was useful to everyone. Since it is the seventh time such event takes place, the activities have been improving since its beginning. We are really proud to carry on such activity. During the last years concrete implications of previous meetings in this series were seen, with more collaboration between national Universities, and exchange of students. We hope this will keep increasing in the near future.

Local governmental involvement:

In this opportunity different Argentinian agencies (FAMAF, CONICET, MinCyT Córdoba, SECyT, FonCyT) contributed with €4000. Most of the money received was used for the lodging and travel expenses of latin-american attendees, as well as their transportation to the hotel. Part of this money was also used for the lodging of the invited speakers. We are happy and grateful for this support, which allowed the event to be a great success. This complemented the important support given to us by the CDC grant from IMU, for which we are very grateful.

Suggested follow-up activities:

The meetings “Quantum” started in 1999, and since 2011 they take place every year in different locations of Argentina and, more recently, south America, as the 2016 edition in Chile and 2014 in Brazil. Next meeting, in 2019, will take place in Montevideo, Uruguay.

December 18, 2018

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date

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signature