



Meeting of ICIAM Officers and member societies in Latin America

July 27, 2021

Present:

ICIAM Officers: Sven Leyffer (Secretary), Heike Fassbender (Treasurer), Maria J. Esteban (Past President), Luis Vega, Wil Schilders (Meeting Chair)

SBMAC, Brasil: Paulo Mancera (ICIAM Representative), Claudia Sagastizábal, Jose Alberto Cuminato (the President, Pablo Martin Rodriguez, excused himself)

SMAIS-Chile, Chile: Alejandro Jofré (President, ICIAM Representative), Hector Ramirez

ASAMACI, Argentina: Pablo Lotito (President), Lisandro Parente

SMM, Mexico: Renato Iturriaga (President), Yasmin Rios (new ICIAM Representative), Jorge Velasco (ICIAM Representative up to recently)

SCM, Colombia: Alvaro Riascos Villegas (President)

SPMAC, Peru: Obidio Rubio (President,)

Brief account of affairs

The meeting started with a word of welcome by the ICIAM Officers, followed by a short round of introductions. After this, the individual member societies presented some history, information about the membership, positioning of the society within the national mathematical landscape, an overview of the main activities and relations with other societies (national and international). Some societies already exist for quite some time (such as SBMAC, dating back to 1978, and SPMAC, founded in 2000), others are still relatively young (such as SMAIS-Chile, founded in 2019). Some are part of the national federation of mathematicians, others are independent organisations. It was instructive to see that several countries are dealing with common societal and industrial challenges. On the other hand, societies also mentioned entirely different subjects they are concentrating on: in Chile, for example, much attention is given to mathematical modelling in the educational context, whereas in Mexico there is a gender equality commission. All societies are active in organizing conferences and workshops, often of a biennial nature. It was also noticed that in most countries the topics of applied mathematics, operations research and statistics reside in different societies. This is quite common all over the world, and in order to have some common feeling, the terminology "mathematical sciences" is often used.

After the coffee/tea break, the ICIAM Officers presented a summary of the objectives of ICIAM, important reports on industrial and applied mathematics, books of success stories, the Bond report entitled "The era of mathematics", statements to convince policy makers and funding officers, ways to communicate about mathematics towards the general public and secondary school pupils.

The presentation ended with a list of potential discussion topics, and the discussion was started. First some scattered remarks that were made:

- Working on societal and industrial problems may be rewarding, but often there is no good measure of this that can help one's career.
- One of the new challenges is to approach the social sciences.
- Often there is quite a distance between universities and industry; part-time professors from industry at a university are rare.
- Students with a sound and broad education in mathematics sometimes need to compete with youngsters that took a crash course in "data science".
- Workshops where industrial challenges are addressed are sometimes used by industry for "head hunting".
- Discussions on math education often lead to very traditional views, and no new courses (which are, in fact, badly needed when going to industry).
- In some countries, courses are provided for engineers and scientists working in industry (as a form of continued education); this can be a source of additional income for the university.
- Joint labs with industry can also be a way to perform the necessary interdisciplinary work on practical challenges.
- ICIAM can help the Latin American countries by disseminating the reports on the impact of applied math on industry, GDP, and the society. Most of these reports are available through EU-MATHS-IN (<https://eu-maths-in.eu/>, "Docs" and "Success Stories" sections).

The meeting and discussion also led to some observations which require further action. For this reason, they are discussed separately below.

Study groups on Mathematics with Industry

Although the terminology employed by the societies is different, it turned out that in many countries so-called study groups in mathematics with industry are held. In Argentina, for example, they are known under the name TAMI. It may be good to start using a common terminology, and either set up a Latin American database, or join forces with the European information service that can be found on <http://miis.maths.ox.ac.uk/>. In fact, ECMI has recently made a contract with Cambridge University Press to make all reports (also from the distant past) available open access. You may also be interested in the website <https://mi-network.org/> where, for example, a manual for the organisation of study groups can be found. A source of inspiration could also be the newly created website <https://www.swi-wiskunde.nl/>. Study groups are an institution on a worldwide scale nowadays, and it may be good to join in and show the contributions of Latin America.

ICIAM Latin American colloquium?

As there are quite a few common topics among societies, it may be a nice idea to have also a common colloquium for Latin American countries once in a while. It was agreed that this should be made kind of exclusive, meaning it should take place only 3-4 times a year. To make it possibly even more exclusive, using the name of ICIAM may be a good idea. A group of people from different countries, with 1-2 ICIAM Officers, could make a schedule for the colloquium, decide on suitable topics and select invited speakers.

DIANOIA Newsletter

It was suggested to have more representatives from Latin America in the editorial board of DIANOIA, leading to more topics specifically from the Latin American member societies. The

Latin American societies are invited to propose names of potential editors to the editor-in-chief, Barbary Keyfitz, keeping in mind their goal in doing so. The representative(s) from this region should preferably represent the entire area.

Schools in Latin America

The CIMPA schools were mentioned, but there was not much discussion on this topic. However, it could potentially be a point of discussion that would lead to further action. It was also pointed out that ICIAM can support more meetings in Latin America. More information can be found here: <https://iciam.org/iciam-conference-support>.

Follow-up meetings

The meeting was appreciated by all, and it was suggested to have regular follow-up meetings (but shorter!). A plan should be made for this.