## About the candidacy of France (Paris) to ICM 2022

In its vote of 29 July 2018 in São Paulo, a few days before the Rio Congress, the General Assembly of National Delegates of the International Mathematical Union (IMU) selected the candidacy of the city of St. Petersburg, in front of that of Paris, for the organization of the International Congress of Mathematicians (ICM) 2022.

The French delegates of the general assembly of the IMU are named among the French National Committee of Mathematicians (Comité National Français de Mathématiciens CNFM), which represents France within the IMU, and was the bearer of the French application to the ICM. The bid itself was prepared by the candidacy committee of the ICM Paris 2022 application (composed in part of members of the CNFM), which after many months of preparation, submitted it to the IMU in November 2016 (file delivered public later on the site ICM Paris 2022), a beautiful and exciting project carried by the entire French mathematical community. In the same time, Russia submitted the candidacy of St. Petersburg. France had declared its intention to present itself at the Seoul Congress in 2014, no other nation at that time had applied (the Russian project did not emerge until autumn 2014).

The Executive Committee of IMU<sup>1</sup> undertook the review of the bids. In particular, a site visit committee, subcommittee of the executive committee, visited both cities in March 2017 to analyze and evaluate the applications. This visit studies in particular the technical aspects related to the organization of a congress of this importance. Following the review, the IMU executive committee met in early April 2017 and recommended the choice of St. Petersburg for the ICM 2022. This decision was made unanimously among the committee, with two abstentions for conflict of interest (S. Mori and W. Werner who did not take part in the discussion).

The disappointment was great. At the request of informations concerning the criteria which led to this recommendation, the executive committee clarified that the decision was taken after a long discussion based on the nomination files and findings from site visits. Among the criteria used :

- the professionalism of the bid and the organizing committee of the congress and the general assembly;

- the mathematical community supporting the candidacy;
- the long-term impact on the national mathematical community hosting the congress;
- the support for mathematicians from emerging countries;

<sup>1.</sup> The Executive Committee IMU, for the period 2015-2018, is composed of S. Mori (Chairman), H. Holden (General Secretary), A. Dickenstein, V. Jones (Vice-Presidents), B. Gross, H. Park, C. Rousseau, V. Srinivas, J. Toland, W. Werner.

- the potential impact on the international mathematical community;

- the practical organization of the congress and the general assembly, in particular the conference center, the accommodation of the participants, the transportation means, the questions of visa, the cultural and social activities.

The committee also mentioned that the bids of France and Russia had several features of resemblance, with in both cases a long and strong mathematical tradition and unwavering support from the national community. Both projects were of high quality, and the reception of the visiting committee in both cities took place in the best conditions. It was also noted that 2022 would constitute for France a fourth congress, without precedent<sup>2</sup>, against one for Russia (Moscow 1966), and that the choice of St. Petersburg would have a significant impact on Russian mathematics. In conclusion, the choice of Russia should not be seen as a disavowal of the French application, but as proof that the IMU had received two excellent bids.

The work of the executive committee of the IMU, composed of indisputable scientific personalities, aims to prepare and inform the choice of the general assembly, analyzing the criteria and feasibility of an ICM in the most conscientious, detailed and ethical manner, at the service of the community. The committee is only proposing a recommendation, the decision being within the final vote of the IMU general assembly (which therefore took place this edition at São Paolo on 29 July 2018); a substantive discussion of the criteria and feasibility of an ICM at a general meeting, however, appears as difficult and unrealistic.

Following a well-established tradition since 1994, all nominations that were not previously recommended by the IMU executive committee withdrew (as reported in the minutes of the general meetings of the past congresses, online on the IMU website), on the one hand, to give an additional year to the organizing country, necessary for an event of this magnitude (M. Viana, Chair of the organizing committee of ICM 2018 in Rio, indicated that preparations had lasted six years), and, on the other hand, to avoid unnecessary and detrimental competition within the international mathematical community. The executive committee of IMU asked France, following the recommendation of April 2017, to gracefully withdraw.

The ICM Paris 2022 candidacy committee wished to maintain the French bid. I left, in the weeks that followed, the committee, convinced that the continuation of the French project, wanted by the committee, was a mistake and a denial of reality. Engaging a balance of power with the authorities of the IMU and then trying to get out of it, it risked being misunderstood by the international mathematical community, a vote of the delegates against the opinion of the IMU executive committee appearing besides as very unlikely. In its proposals and initiatives, the bid committee has also tended to confuse the role of the material organization with that of the program committee, which must design the content of the congress and is sovereign to decide all the activities that take place within the framework of the ICM.

In order to manage the logistics of such an event, the ICM Paris 2022 bid committee has

<sup>2.</sup> The calculation of the IMU is somewhat clumsy, since it accounts, besides 1900 (Paris) and 1970 (Nice), the congress of Strasbourg in 1920 who ruled out, for political reasons following the First World War, the mathematical communities of the central European empires, including Germany.

signed, on behalf of the CNFM and dated 22 January 2015, a service contract with a professional conference organizer for both the preparation, the candidacy in its various aspects, media in particular, before the decision of the IMU, and the material and technical organization once the project is selected. In this process, the committee (I was then part of it) committed itself somewhat imprudently, without an in-depth review of past IMU decision-making processes, and without very assured financial guarantees, on a termination clause of the contract in case of abandonment up to  $150k \in$ . This element played in the maintenance of the French candidacy.

If eminent voices have expressed their solidarity with the candidacy of Paris, several leading personalities, in France and around the world, including some members of the scientific council of ICM Paris 2022, have recommended to follow the invitation of the IMU executive committee and to withdraw the bid. Financial arrangements, such as a distribution between guardianships and institutional support, or even an implicit agreement with the IMU executive committee, could have been considered.

In a press release of July 3, 2017<sup>3</sup>, the French learned societies, the institute of Cnrs, Inria and the Parisian mathematical foundations and LabEx declared "to be persuaded of the merits of the ICM Paris 2022 candidacy committee's approach and to support the candidacy" (recommending the extension of the collaboration to all the actors of the project and "the development of a communication allowing, in a spirit of healthy competition and restraint, to carry the support at the general assembly, and offering the best perception of the scientific and organizational ambitions of the candidacy of Paris"). The CNFM is not officially among the endorsers of this statement.

The French application was thus presented, and as was foreseeable, defeated (83 votes against 63), at the general meeting of São Paulo. This election between two competing nations was a first in the history of the ICM.

30 September 2018 Michel Ledoux

<sup>3.</sup> http://smf.emath.fr/sites/smf.emath.fr/files/communique-3-7-17.pdf