



CENTRE INTERNATIONAL DE MATHÉMATIQUES PURES ET APPLIQUÉES

INTERNATIONAL CENTER FOR PURE AND APPLIED MATHEMATICS

cimpa@unice.fr

++33 (0) 492 07 7930

Provisional English version - Please contact CIMPA to propose improvements on the present translation.

CIMPA RESEARCH SCHOOL

How to prepare, run and evaluate a research school?

ROADMAP

This document gives a broad outline of the procedures used by CIMPA.

Each CIMPA research school has its specificities. The Director, his regional scientific officers (RSR) and the administrative office of CIMPA contribute to the preparation and the success of each project.

Added on June 16th, 2011: Note that in case the main guidelines of the road map are not met, CIMPA may consider to suspend or report the research school.

This document covers the following points:

- Preparation of the project
- Before the research school
- During the research school
- After the research school

CIMPA 4, avenue Joachim F-06100 Nice, France

+33 (0) 4 92 07 79 30

cimpa@unice.fr

www.cimpa-icpam.org

PREPARATION OF THE PROJECT

Acceptance or rejection of a school project is decided by the Steering Council based on recommendations of the Scientific Committee.

Objectives

1. A CIMPA research school is intended first and foremost for young mathematicians of the country in which it is held, and for those of countries nearby. The level is pre-Doc. or post-Doc. Women are especially encouraged to apply.
2. It is held preferably in a place where mathematics is in the process of development, in order to support its structuring and to be of interest to young people there or in the vicinity.
3. The subject of the research school must correspond to prior on-site research work. It must have a foreseeable development in the region.
4. A CIMPA research school is training by and for research. A connection with teaching or research activities in the region where the school is held is desirable.
5. Any mathematician of any country can apply.
6. After each research school, a scientific production in the form of lecture notes deposited on the Internet in a perennial way (for example on arXiv) has to be made. A hard-copy edition by an editor is possible.
7. A Web site of the research school is mandatory, to be maintained by the organizers.

Procedure

1. A project must be planned approximately two years in advance. It has to be submitted between March and July of a year X. Then it is considered by the Scientific Committee and the Governing Board. The result is known at the beginning of the year X+1, the research school is held during the year X+2.
2. Each research school has two main scientific organizers, one of whom must be local. They are the interlocutors of CIMPA and can gather an organizing committee. Taking into account gender balance among the organizers is encouraged.
3. A research school lasts two weeks or 10 days, and comprises between 50 and 60 hours of talks. Usually there are no talks on Wednesday afternoon..
4. Approximately 2/3 of the time (and at least half of it) is intended for courses for young mathematicians.
5. Talks of a higher level can take place, which young mathematicians should be able to follow.
6. Scientific and pedagogical considerations should come first when selecting the course lecturers, who should be experienced mathematicians. Whenever possible, CIMPA encourages selecting some lecturers from the region where the school will take place. Taking into account gender balance is also strongly encouraged. The EMS/EWM Scientific Committee may be consulted if this is a challenge:
<http://www.euro-math-soc.eu/comm-women.html>
7. They prepare a summary of the course and suggest references.



8. They provide notes of their course after the research school, under their responsibility.

Budget

1. A research school is intended to promote the development of mathematics; the lecturers are thus not remunerated. They can ask (with the support of CIMPA) that their course be included in their teaching duty at their parent institution, with no guarantee of success.
2. The people in charge of an CIMPA research school must seek to secure diversified sources of funding: international (ICTP, IMU, AUF, Embassies,...) and local (local organizations, companies,...).
3. The people in charge make a budget (resources and expenses). They indicate if the funds are requested or confirmed.
4. They particularly seek funds for the travel and accommodation expenses of the lecturers (lecturers' institutions, Embassies, local organizations, companies...).
5. The RSR or the Director of CIMPA may help in obtaining these funds, in coordination with the people in charge of the research school.
6. The financial participation of CIMPA occurs after all other means are exhausted.
7. At least $\frac{2}{3}$ of CIMPA funding is intended for travel expenses of young mathematicians of the vicinity and if necessary for their accommodation expenses; the latter should preferably be dealt with locally. If absolutely necessary, CIMPA can partly fund the expenses of some lecturers (approximately $\frac{1}{3}$ of the contribution of CIMPA). Expenses for participants from the country are normally covered by local financing.
8. Typically the financial support from CIMPA is at most $\frac{1}{3}$ of the total foreseeable final budget, which comprises the travel and accommodation expenses paid directly by other organizations. For particular cases the participation of CIMPA can vary between 20% and 50% of the total budget.
9. It varies between 5K€ and 10K€, according to needs of the research schools and the annual budget of CIMPA.
10. A registration fee for mathematicians outside the region can be considered. Its amount can be modulated according to countries of origin. Registration fees collected are used by CIMPA for its global activity, including those of the research school.

Place

1. One common site is strongly recommended for the talks, meals and accommodation. Preferably all meals are taken together, at least those at midday.

2. The site is simple and adequate for the talks. CIMPA research schools do not take place in luxurious environments.
3. Bibliographical documentation for the courses should be available on site.
4. The site is favorable to exchanges, discussions and informal working sessions.
5. An excursion-walk, for example on Wednesday afternoon, can be organized. A financial participation can be required.

BEFORE

1. Once the Scientific Committee and the Governing Board of CIMPA approve the project, the scientific organizers of the research school contact their RSR.
2. The two scientific organizers set up a Web site that they maintain. This Web site is the backbone of the meeting, before, during and after.
3. If necessary, CIMPA can contribute to the development of the Web site or host it.
4. CIMPA sets up a Web page concerning the research school and a link towards its Web site. Three months after the end of the school, a complete and permanent copy of the Web site will be recorded on the Web site of CIMPA.
5. The participation and the registration of local mathematicians are managed on site by the organizers.
6. The other requests for participation and funding are made via CIMPA.
7. Two months before the beginning of the research school, the two scientific organizers and CIMPA select the participants, as well as the young mathematicians who will be funded by CIMPA. A maximum amount of travel expenses is fixed for each one.
8. They study the possible participation of CIMPA in the expenses of the lecturers.
9. The people funded by CIMPA buy their own travel ticket, they will be refunded at real cost, not exceeding the maximum amount allotted. The purchase of the ticket by other manner can be studied by CIMPA, at the request of the participants.

DURING

1. A person from CIMPA (the Director, the RSR, or someone representing it) attends the research school. The travel expenses of this colleague are funded separately from the budget of the school. His accommodation is taken care of by the research school.
2. He presents CIMPA and makes sure that the research school develops in agreement with the mission of CIMPA, in particular towards young mathematicians. He intervenes if necessary.
3. He establishes contacts with local authorities, contributes to the discussion on the future evolution of mathematics, in training and research.
4. He makes sure that the complete budget of the research school is in agreement with the estimates.



5. He has the responsibility of refunding the participants according to the estimates, obtains a copy of their passport, makes them sign the receipts provided by the administration of CIMPA and keeps any original document (invoices, boarding passes) justifying refunding. He forwards them to CIMPA on his return.
6. In order to be able to finance other research schools, the contribution of CIMPA can be decreased depending on circumstances, for example when other last-minute funds are obtained. In certain cases the budget of CIMPA can be increased in view of exceptional circumstances. This flexibility is a kind of limited insurance.

AFTER

1. The scientific organizers of the research school make sure that each lecturer writes notes (or arranges for young mathematicians attending the research school to do so). The notes of a CIMPA research school can be deposited on "Cours en ligne - archives ouvertes" [CEL-AO] if they are completely written (some summary notes in support with the lectures are not accepted). They must be able to be useful to all, and not only to the participants. They are deposited under the scientific responsibility of their author and with the technical assistance of CIMPA (which cannot be given the responsibility to type them).
CEL-AO : <http://cel.archives-ouvertes.fr>,
Collection du CIMPA : <http://cel.archives-ouvertes.fr/CIMPA>
2. They make sure that the Web site establishes a link towards these notes and that the final list of participants is up to date.
3. Two reports are prepared, one by the local organizer, the other by CIMPA representative. Each report considers the scientific and the financial side. They are placed on the web site of the research school.
4. Three months after the end of the school the Web site is closed, a complete copy is then lodged in a permanent way on the Web site of CIMPA for consultation, filing and evaluation.

December 2011