



www.cfem.asso.fr

*Commission française pour
l'enseignement des mathématiques*
Académie des Sciences-ADIREM-APMEP-ARDM-CNFM-
Femmes & Mathématiques-IGEN-IHP-SFds-SMAI-SMF-UPS

What is the CFEM?

The CFEM is the French sub-commission of the ICMI (International Commission for Mathematical Instruction). It is a common platform for all professional and scientific associations and societies dealing with Mathematics and teaching Mathematics (ADIREM, APMEP, ARDM, CNFM, *femmes & mathématiques*, *Institut Henri Poincaré*, SFDS, SMAI, SMF, UPS). The CFEM works in close connection with the *Inspection Générale de Mathématiques*, from the Ministry of Education and with the French *Académie des Sciences*.

The role of the CFEM is to encourage cooperation between the various actors in the area of Mathematics and teaching Mathematics, and their commitment in joint activities to promote lively methods of teaching the current Mathematics. The CFEM acts in that spirit when it addresses public bodies and, more generally, society.

An international vocation

Through its link with the ICMI, the CFEM plays an essential role as an international interface. It coordinates in particular the French participation in the International Congresses on Mathematical Education (ICME), which take place every 4 years: the most recent ones are ICME 12 (Seoul, Corea, 2012) and ICME 13 (Hamburg, Germany, 24-31 July 2016).

The CFEM also contributes to the international studies regularly conducted by ICMI; recently: *Proof and proving in Mathematics Education* (19), *Educational interfaces between Mathematics and Industry* (20), *Mathematics Education and language diversity* (21), *Task design* (22) and *Primary Mathematics Study on Whole Numbers* (23).

The activity of the CFEM is also stimulated by the international recognition of French research in Mathematical Education; this is testified by the ICMI awards: Klein Medal to Guy Brousseau in 2003 and to Michèle Artigue in 2013; Freudenthal Medal to Yves Chevallard in 2009.

Commitment to French-speaking world

The CFEM is very active in the *Espace Mathématique Francophone* (EMF) (French-speaking mathematical area), created in 2000 in Grenoble and which holds an international meeting every three years. Six countries have already hosted this important event: France, Tunisia, Canada (Quebec), Senegal, Switzerland and Algeria. EMF 2015 took place in Algiers and EMF 2018 will be in Paris.

Visit the EMF website: <http://emf.unige.ch/>

**The following pages give a short description
of the institutions which compose CFEM.**





<http://www.univ-irem.fr>

ADIREM

Assemblée des **D**irecteurs d'**I**nstituts de **R**echerche
sur l'**E**nseignement des **M**athématiques

*(Assembly of the Directors of
Institutes of Research on Mathematics Teaching)*

The Institutes of Research on Mathematics Teaching (IREM), were created in 1970 in the universities. They associate for long-term work teachers from primary schools, secondary schools, and universities. The 28 IREM's constitute a national network in France which enables a national collaboration, with 17 specific commissions. The IREM's support research on the problems raised by the teaching of mathematics, and organise in-service teacher training. They publish and broadcast pedagogical resources (articles, textbooks, online material etc.),



<http://www.apmep.asso.fr>

APMEP

Association des **P**rofesseurs de **M**athématiques
de l'**E**nseignement **P**ublic

(Association of Mathematics Teachers of public instruction)

Created in 1910, the Association of Mathematics teachers of public instruction (APMEP) proposes or supports every action which seems likely to improve mathematics teaching. It represents mathematics teachers, in particular for discussions with the ministry of education. It organises seminars and conferences, in particular « national days », yearly organized since 1960. It proposes resources on its website, publishes professional texts, and three journals : the « green bulletin », the « BGV », and the « PLOT » newspaper. Independent, the association is only funded by its members.



<http://www.ardm.eu>

ARDM

Association pour la **R**echerche
en **D**idactique des **M**athématiques

(Association for Research in Mathematics Didactics)

The Association for Research in the Didactics of Mathematics gathers researchers from France and from other countries, all over the world, interested in the development and diffusion of research in the didactics of mathematics. It is based in France and aims at promoting the diffusion of French and international research results in didactics of mathematics.

In order to contribute to the development and discussion of these results, the ARDM:

- organises several seminars every year;
- sets up a summer school every two years (the next one will take place in summer 2017);
- manages the international journal RDM (*Recherches en Didactique des Mathématiques*) which publishes articles of fundamental research in the field of mathematical didactics, in French, English and Spanish.



femmes & mathématiques

(Women & Mathematics)

<http://www.femmes-et-maths.fr>

The association *Women and Mathematics* was founded in 1987. Its main aim is to promote the presence of women in the world of Mathematics. To achieve this it organises actions to eliminate sexist stereotypes and to encourage girls to study Mathematics and in general, Science and Technology. The association works for the parity of women in Mathematics-related professions, in particular for the employment of more women in universities and research institutes.

Women and Mathematics is also a meeting point for women where their contribution in Mathematics research and teaching is highlighted.



<http://www.ihp.fr>

IHP

Institut **H**enri **P**oincaré

The Henri Poincaré institute is located at the center of Paris and is one of oldest and most dynamic international structures dedicated to mathematics and fundamental physics. At the service of research and society, the institute will host a mathematics museum from 2020. This is a privileged space, embodying the excellence and dynamism of French mathematics and attracting visitors from all over the world. Its atmosphere is conducive to reflexion and hosts meetings and discussions between scientists from all backgrounds, ranging from general relativity to computer science and mathematical biology. The institute's core mission is also to popularize mathematics by reaching out to teachers, students, politicians, the media and the general public



<http://www.sfds.asso.fr>

SFdS

Société Française de Statistique

(French Statistics Society)

The French Statistics Society was created in 1997, merging two societies: the Association for Statistics and its uses, and the Statistics Society of Paris. It gathers all statisticians, practitioners, researchers and teachers. The society is willing to support discussions between all these statisticians. Its activities are developed around ten working groups organising training sessions, congresses, meetings. It publishes several electronic journals, including one journal devoted to statistics teaching and learning, and books in French proposing syntheses on specific statistical themes.



<http://smαι.emath.fr>

SMAI

Société de Mathématiques
Appliquées et Industrielles

(Society of Applied and Industrial Mathematics)

The Society of Applied and Industrial Mathematics (SMAI) is a recognized non-profit association, founded in 1983 to enhance the specificity and importance of applied mathematics, to promote their influence through research, applications in industry, publications, teaching, training of researchers and engineers, and scientific mediation. The SMAI organizes annual national conferences, meetings between Mathematics and Industry, schools between researchers, PhD students and industrials, as well as the Maths Jobs Fair with SFdS and Amies (*Agence pour les mathématiques en interaction avec l'entreprise et la société*). It publishes several internationally renowned journals, research papers and collections of teaching, and in partnership brochures for youth and the general public.



<http://smf.emath.fr>

SMF

Société Mathématique de France

(French Mathematical Society)

Created in 1872, the French Mathematical Society (SMF) is one of the oldest learned societies for mathematics in the world. It comes under the rules of French 1901 law, and has been a state approved association since 1988. Its aim is "to advance and promote studies in pure and applied mathematics".

It devotes much of its activity to popularizing mathematics, reaching the general public and it is also concerned with all aspects of mathematical teaching.

The SMF manages the International Centre of Mathematics (CIRM) in Luminy and participates in the organisation of many national and international congresses, in partnership with other mathematical societies. The SMF is the largest publisher in France of high level mathematical books and journals.



<http://prepas.org/ups>

UPS

Union des Professeurs de classes
préparatoires Scientifiques

(Union of Teachers of Preparatory Classes)

The Union of Teachers of Preparatory Classes is an association (1901 law), created in 1927. It comprises 2800 members, with almost all the teachers (Mathematics, Physical Sciences, Chemistry) of preparatory classes in France. These preparatory classes train for two years entrants to engineering schools. The association has strong links with these schools, and develops links between its members and the other partners of teaching and research.