Meeting of the Mathematical Society of Mongolia
CIMPA, SMF, EMS and IMU

Michel Waldschmidt

Institut de Mathématiques de Jussieu — Paris VI
http://www.math.jussieu.fr/∼miw/

Websites : CIMPA, SMF, EMS and IMU

```
http://cimpa.info/
http://smf.emath.fr/
http://www.euro-math-soc.eu/
http://www.mathunion.org/
```

CIMPA

`http://cimpa.info/`

Centre International de Mathématiques Pures et Appliquées

Langues du site [fr] français

Actualités

Affiche 2016

Programme des écoles de recherche pour 2016

    Lire la suite

Appel à projets pour Écoles de recherche CIMPA en 2017

Appel à projet pour Écoles de recherche CIMPA. Dépôts des projets à partir du 1er mars 2015

    Lire la suite

Projet retenu pour l'enseignement au Master de mathématiques à l'Université Royale de Phnom Penh (URPP) au Cambodge en 2015-16, suite à l'appel à projets.

    Lire la suite

À noter

Info-lettre CIMPA n° 25

Prix Ramanujan 2015

Soutien ICIAM 2015

Bourses de Master en France

Etudes régionales de l'UMI

Abel Visiting Scholar Program

Action au Cambodge

Convention entre le CIMPA et l'INRIA
Convention signée le 7 novembre 2011 à Rocquencourt

Memorandum of understanding entre le CIMPA et l'AIMS
Convention signée le 15 juin 2011 au Cap

Convention entre le CIMPA et l'Academie Hassan II du Maroc
Convention signée le 18 mai

CIMPA Research Schools

- Open call every year: proposals for two-week schools come from everywhere, some are encouraged by CIMPA members,

- the road-map is crucial, organization is local with help from CIMPA, using a North-South-South format.

- the Scientific Council evaluates and makes recommendations,

- the Steering Council selects around 20 research school projects.

The open call procedure is in accordance with a decision of the GA of CIMPA in June 2014 reinforcing our commitment and which we apply everywhere:

Each support by CIMPA will correspond to a selection carried out following an open call for projects.

CENTRE INTERNATIONAL DE MATHÉMATIQUES PURES ET APPLIQUÉES
INTERNATIONAL CENTRE FOR PURE AND APPLIED MATHEMATICS

CIMPA

CIMPA Research Schools

- Young mathematicians from neighboring countries apply (CV, motivation and recommendation letters),

- The organizers and CIMPA makes a selection and several receive full CIMPA financial support (at least 2/3 of CIMPA total support is to this end),

- Lecturers and speakers are not paid. In most cases they use their own funding for travel,

- CIMPA helps through letters, discussions with organizers, explanation to authorities and/or fund raising.

CENTRE INTERNATIONAL DE MATHÉMATIQUES PURES ET APPLIQUÉES
INTERNATIONAL CENTRE FOR PURE AND APPLIED MATHEMATICS

CIMPA

Santiago
Chile January 11›22
Toric methods in Geometry, Arithmetics and Dynamics *with ICTP*

Merida / Guanajuato
Mexico Feb 22›March 4
Moduli of Curves *with ICTP*

Mar del Plata
Argentina March 7›18
Homological Methods, Representation Theory and Cluster Algebras

Solis
Uruguay March 31›April 9
Hyperbolic groups and their representations

Santiago de Cuba
Cuba June 8›17
Mathematical modeling in Biology and Medicine

Medellin
Colombia June 13›24
Algebraic, Enumerative and Geometric Combinatorics *ECCO 2016*

Havana
Cuba August 29›Sep.9
Mathematical Models for Security Applications

Nouakchott
Mauritania Feb 15›26
Théorie Algorithmique des Nombres et Cryptographie

Abidjan
Ivory Coast March 14›25
Géométrie et Analyse

Saint-Louis
Sénégal April 5›15
Méthodes statistiques pour l'évaluation des risques extrêmes: Applications à l'Environnement, l'Alimentation et l'Assurance

Dakar
Sénégal May 2›12
Analyse Géométrique des Formes Optimales (AGFO)

Nouakchott
Mauritania June 12›24
Equations aux Dérivées Partielles et Calcul Scientifique

Antananarivo
Madagascar July 11›21
Combinatoire et Algorithmique

Yaoundé
Cameroon Sept 19›30
Modélisation Mathématique et Informatique en Epidémiologie, Ecologie et Agronomie

Quatre Bornes
Mauritius Dec 5›16
Mathematical Models in Biology and Medicine

Nador
Morocco May 9›21
Modélisation, Analyses mathématiques et numérique pour les problèmes aux dérivées partielles

Tipaza
Algeria May 22›June 4
Théorie des Nombres et Applications

Rabat
Morocco July 10›20
Rational Homotopy Theory and its Interactions

Tunis
Tunisia Oct 4›14
Mathématiques pour la Biologie

Kairouan
Tunisia Nov 7›19
Théorie Spectrale des Graphes et des Variétés

Ho Chi Minh
Vietnam August 1›12
Lattices and application to Cryptography and Coding theory *with ICTP*

Kolkata
India Dec 1›12
On Geometric Flows

CIMPA 20**16**
Écoles de recherche
Research Schools

INTERNATIONAL CENTRE FOR PURE AND APPLIED MATHEMATICS (CIMPA) is an international organisation that promotes research and higher education in Mathematics in developing countries. CIMPA is sponsored by UNESCO and supported by Research Ministries from France, Spain and Norway, by University of Nice Sophia Antipolis (France) and by the Centre National de la Recherche Scientifique (France).

http://cimpa.info

Numbers

279 Research Schools since 1979

Countries by continent:

- Africa : 18
- Asia : 12
- Latin America and Caribbean : 13
- Middle East : 8

13500 young mathematicians
2500 speakers, 1100 from developing countries

EMALCAs, AMS, SEAMS and WAMS

SEAMS 2015 schools with the South East Asian Mathematical Society

- Hanoi – Vietnam, 01/03 – 15/03
- HCMC – Vietnam, 31/08 – 08/09
- Sanata Dharma,Yogyakarta, Indonesia, 07/09 – 15/09
- Makassar, South Sulawesi, Indonesia, 28/09 – 06/10
- Serdang, Selangor, Malaysia, 02/10 – 10/10
- Gadjah Mada,Yogyakarta, Indonesia, 09/11 – 17/11

CENTRE INTERNATIONAL DE MATHÉMATIQUES PURES ET APPLIQUÉES
INTERNATIONAL CENTRE FOR PURE AND APPLIED MATHEMATICS

CIMPA

SMF   http://smf.emath.fr/

A la une

Prochaines sessions "Etats de la Recherche"
"Supraconductivité, superfluidité, vortex" du 26 au 28 octobre 2015 à l'IHP.
"Aspects géométriques de la relativité générale" du 28 septembre au 01 octobre 2015 à Montpellier

Un lycée, un texte, un mathématicien.
Un documentaire sur le cycle BnF/SMF "un texte, un mathématicien" réalisé par Animath à l'occasion du dixième anniversaire du cycle.

La nouvelle Gazette vient de paraître.
Téléchargez le pdf.

Victoires des équipes françaises à l'International Tournament of Young Mathematicians (ITYM).
En savoir plus – Résultats par pays.

Projet de décret sur le doctorat.
La SMF et les sociétés savantes réagissent.

En bref...

- 04/07/15 - Décès de Daniel Kastler
- 26/06/15 - Résultats des élections au conseil de la SMF.
- 12/06/15 - Décès de Pierre Dolbeault
- 01/06/15 - Jean-Michel Morel reçoit la médaille de l'innovation du CNRS. En savoir plus.
- 27/05/15 - Rapport sur l'impact des mathématiques dans l'économie et la société française.
- 15/05/15 - Eléments de réflexion sur les projets de programmes des cycles 2, 3 et 4, en mathématiques
- 16/04/15 - La vidéo de la conférence du 15/04/15 d'I. Gallagher : "Kolmogorov, le spectre de la turbulence" est disponible.

- La Gazette de juillet
- L'Officiel des mathématiques

- Tribunes
- Textes émanant de la SMF

Evénements à venir

- Fractals and Related Fields III
19/09/2015 - 25/09/2015
Porquerolles
- "Aspects géométriques de la relativité générale"
28/09/2015 - 01/10/2015
Montpellier
- Théorie des Nombres, Systèmes de Numération, Théorie Ergodique
28/09/2015 - 29/09/2015
Le Bourget du lac
- 25ieme anniversaire de la Société Mathématique Européenne
22/10/2015
IHP, Paris, France
- "Supraconductivité, superfluidité, vortex"
26/10/2015 - 28/10/2015
IHP, Paris
- PGMO Days 2015
27/10/2015 - 28/10/2015
ENSTA ParisTech, Palaiseau
- Prochain Séminaire Bourbaki
07/11/2015
IHP, Paris
- Une question, un chercheur – novembre 2015 - Claire Mathieu
09/11/2015 - 19:30 - 21:00
Université Paris 7

Calendrier

AU CŒUR DES MATHÉMATIQUES : LA SOCIÉTÉ MATHÉMATIQUE DE FRANCE

Une société savante, fondée en 1872, reconnue d'utilité publique

2000 adhérents

- La SMF rassemble enseignants, chercheurs, doctorants, ingénieurs, amateurs autour de la passion des mathématiques.

- Elle fait connaître les mathématiques dans leur diversité, accompagne leur évolution, encourage leur insertion dans la société.

- La SMF s'intéresse aux mathématiques sous tous leurs aspects : enseignement à tous niveaux, avancées de la recherche, interactions avec les sciences et techniques.

- Elle est en relation avec les sociétés et institutions qui poursuivent les mêmes buts. Elle interagit avec beaucoup d'entre elles, que ce soit en France ou dans le monde.

- La SMF partage avec le C.N.R.S. (Centre National de la Recherche Scientifique) la tutelle du CIRM, Unité Mixte (UMS 822).

- Elle publie des mathématiques depuis sa création. Ses publications sont ouvertes à la communauté mathématique internationale.

En savoir plus

Pourquoi adhérer ?

Adhérer

SMF   http://smf.emath.fr/node/3140/

FONCTIONNEMENT DE LA SOCIÉTÉ - INSTANCES

Fondée en 1872, la **Société Mathématique de France (SMF)** est l'une des plus anciennes sociétés savantes pour les mathématiques dans le monde. Association loi 1901, reconnue d'utilité publique, elle a pour but « l'avancement et la propagation des études de Mathématiques pures et appliquées ».

Ouverte à tous les mathématiciens, amateurs ou professionnels, cette société est formée de membres individuels (personnes physiques) et de membres institutionnels (laboratoires de recherches, bibliothèques, institutions...).

Instances

- Conseil d'administration
- Bureau
- Conseil scientifique

En savoir plus sur les instances.

La Gazette des mathématiciens

Revue interne de la Société, elle traite différents aspects de la vie scientifique, culturelle et organisationnelle des mathématiques.

Documents

- Statuts
- Règlement intérieur
- Documents administratifs
  - Publication au Journal Officiel (2 décembre 1998, format pdf, 204 Ko)
  - Arrêté du Ministère (19 novembre 1998, format pdf, 124 Ko)
- Rapports moraux

SMF books `http://smf.emath.fr/content/publications`

Annales scientifiques de l'ENS
Astérisque
Bulletin de la SMF
Mémoires de la SMF
Panoramas et Synthèses
Revue d'histoire des mathématiques
Gazette des mathématiciens

SMF books

Astérisque
Cours spécialisés
Documents mathématiques
Mémoires de la SMF
Panoramas et Synthèses
Séminaires et congrès
SMF/AMS Texts and Monographs
La Série T
Fascicules des journées annuelles
"Algorithmes" et "Eléments pour une histoire de
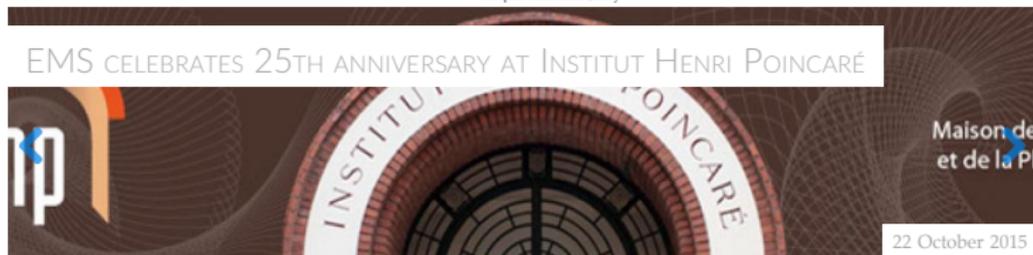l'informatique" par D. Knuth
Réédition du Séminaire Bourbaki
Réédition des œuvres scientifiques de Jean Leray
Revue de l'Institut Elie Cartan

EMS `http://www.euro-math-soc.eu/`

EMS CELEBRATES 25TH ANNIVERSARY AT INSTITUT HENRI POINCARÉ

Maison de
et de la Ph

22 October 2015

The European Mathematical Society is a learned society representing
mathematicians throughout Europe. It promotes the development of all aspects of
mathematics in Europe, in particular mathematical research, relations of
mathematics to society, relations to European institutions, and mathematical
education. The EMS has as its members around 60 national mathematical societies
in Europe, 40 mathematical research centres and departments, and 3000
individuals.

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From the President

Meetings of Presidents

Agenda

News

Jobs posted

Welcome message from EMS president Pavel

Postdoc in Mathematics of Elliptic Integrable Systems
Sweden

EMS CDC   `http://euro-math-soc.eu/EMS-CDC/`

The European Mathematical Society
Committee for Developing Countries

Home   About Us   **Members**   Activities   Book Donation   **ERCE**   Reports

The latest news from the EMS-CDC...

Roundtable report	June 2015

At the EMS AGM in Oslo in April, we held a roundtable discussion on *Strategies for developing mathematical research in less developed countries* The discussion started with a presentation by Wandera Ogana, President of the IMU CDC. A report of the discussion can now be found here.

zbMATH info for developing countries	May 2015

We've set up a new page setting out all the information on how people in developing countries can access the reviewing service zbMATH. You can see it here.

AuthorAID Online Course in Research Writing and Proposal Writing	May 2015

The international research community AuthorAID have announced an upcoming online course in research writing and proposal writing.

Main topics covered in the course: (1) Writing research papers for publication in peer-reviewed journals, (2) Writing grant proposals to seek funding for research.

Who the course is for: Researchers living and working in eligible developing countries. Early

EMS CDC `http://euro-math-soc.eu/EMS-CDC/about.php`

EMS CDC `http://euro-math-soc.eu/EMS-CDC/members.php`

The European Mathematical Society
Committee for Developing Countries

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All email addresses have form e-name@domain

Members

Name	E-name	Domain
Leif Abrahamsson (Uppsala)	leifab	math.uu.se
Vice-chair: Giulia di Nunno (Oslo)	giulian	math.uio.no
Anna Fino (Torino)	annamaria.fino	unito.it
Gert-Martin Greuel (Kaiserslautern)	greuel	zentralblatt-math.org
Joana Teles (Coimbra)	jteles	mat.uc.pt
Ramadas Ramakrishnan Trivandrum	ramadas	ictp.it
Paul Vaderlind (Stockhom)	paul	math.su.se
Fernando Rodriguez Villegas (ICTP)	villegas	ictp.it
Begoña Vitoriano (Madrid)	bvitoriano	mat.ucm.es
Chair: Michel Waldschmidt (Paris)	miw	math.jussieu.fr

EC liaison

EMS CDC

http://euro-math-soc.eu/EMS-CDC/activities.php

The European Mathematical Society Committee for Developing Countries

Home   About Us   Members   **Activities**   Book Donation   ERCE   Reports

Aims and Objectives

We aim to assist developing countries in all possible ways. Some examples:

- the development of mathematics curricula;
- cooperation with local staff in conducting M.Sc. and Ph.D. programs;
- helping to build up libraries;
- helping to build up regional centres and networks;
- providing information about further studies for students from developing regions;
- sourcing funds for junior and senior researchers to attend conferences.

Our activities (past, present and future)

We started work in earnest in 2002. Since then we have expanded our aims and been involved in a number of projects.

- **Agreement with zbMATH**: free access for Developing Countries. Details of this scheme are here.
- **Book donation scheme**: More details are here. New donors and recipients are always welcome. We have already moved tens of tonnes of books and journals, from Europe, USA, Canada, to Africa, South East Asia, and South and Central America.
- **Funding conferences**: Decisions to support a conference are taken once a year, during our annual meeting in April. We have funded participants to ICM06 in Madrid, a speaker to Mongolia, part of a CIMPA school, part of the 2nd African Women Mathematics workshop, and so on.

EMS CDC

`http://euro-math-soc.eu/EMS-CDC/donation.php`

EMS-CDC The European Mathematical Society Committee for Developing Countries

The European Mathematical Society
Committee for Developing Countries

Home   **About Us**   **Members**   **Activities**   **Book Donation**   **ERCE**   **Reports**

We aim to send books and journals donated by mathematicians in the developed world to institutes and departments in the developing world. We have received quite a number of generous offers: from individuals who retire, from institutes/libraries getting rid of excess stock, from libraries going digital, and also from publishers' surplus. We continue to welcome such generosity.

On the other hand, we also have a list of recipients: those who have promised to make available to all local mathematicians freely the donated material, and to keep it in good condition. This list is ever expanding, and we welcome any such institutes to contact us for this purpose.

The shipping costs are high, but we are supported financially, on a case-by-case basis, by ICTP, American Mathematical Society, London Mathematical Society, Zentralblatt, The Norwegian Programme for Development, Research and Education (NUFU), and also our own very limited funds. We have moved tens of tonnes of books and journals, from Europe, USA and Canada, to Africa, South East Asia, and South and Central America.

URL of this website: http://ems-cdc.org
Last modified: 1 May 2015

1/1

EMS CDC   http://euro-math-soc.eu/EMS-CDC/erce.php

The European Mathematical Society
Committee for Developing Countries

Home	About Us	Members	Activities	Book Donation	**ERCE**	Reports

Emerging Regional Centres of Excellence (ERCE)

The focus of this project is the education of students in the developed world to the Masters level. We aim to tailor our approach so that it is appropriate to the different levels of development that exist in different parts of the world. Our first call for interest went out in 2010, another followed in 2012, and the third has just gone out (see above).

To train mathematicians from the least developed regions to say the Masters level, it is not efficient, nor necessary, to send them to institutions of the highest level. Indeed among the emerging economical regions there are very good centres which can train mathematicians to the Masters level and higher. After the Master's degree, if the student is capable, then we can try to find ways of sending him or her to Europe to do a Ph.D. In fact, EMS-CDC, in collaboration with CIMPA, has already educated a Cambodian student in Vietnam to Masters level, with two more doing the course in 2010/2011.

It is in this spirit that our committee wishes to propose a scheme of **Emerging Regional Centres of Excellence (ERCE)**. The idea is for EMS to select, endorse and help a number of such centres to offer training to M.Sc. level to students from less developed countries in their region. Following the above encouraging example, provided there are institutions in the emerging economies who are interested in participating, and with the backing of the EMS, our committee is confident that such a scheme will work well.

EMS CDC http://euro-math-soc.eu/EMS-CDC/reports.php

The European Mathematical Society
Committee for Developing Countries

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2015

- 12.06.2015 Report by Michel Jambu on CIMPA activity in South East Asia.
- 10.06.2015 Report on the roundtable discussion at CDC AGM in Oslo. The report includes a presentation by Wandera Ogana, President IMU-CDC.
- 09.04.2015 Individual reports for CDC AGM, Oslo, Norway.
  - Leif Abrahamson (on ISP);
  - Giulia Di Nunno;
  - Herbert Fleischner;
  - Nick Gill;
  - Gert-Martin Greuel (for zbMath);
  - Andreas Griewank;
  - Michel Jambu;
  - Stefano Luzzato;
  - Francesco Pappalardi;
  - Marie-Françoise Roy;
  - Joana Teles;
  - Tsou Sheung Tsun (presentation on CIMPA);
  - Bengt Ove Turesson;

European Mathematical Society Committee for Developing Countries

http://euro-math-soc.eu/EMS-CDC/

EMS CDC – presentation

The Committee for Developing Countries is a committee of the European Mathematical Society (EMS). It consists of about ten members and ten associate members, most of whom are engaged in development work in their capacity as heads of various such projects. We aim to assist developing countries in all possible ways.

http://euro-math-soc.eu/EMS-CDC/

We work alongside a number of organisations, including :

Members and Associate Members

Leif Abrahamsson (Uppsala)

Giulia di Nunno (Oslo)

Anna Fino (Torino)

Gert-Martin Greuel (Kaiserslautern)

Joana Teles (Coimbra)

Ramadas Ramakrishnan
Trivandrum (CMI)

Paul Vaderlind (Stockhom)

Fernando Rodriguez Villegas
(ICTP)

Begoña Vitoriano (Madrid)

Michel Waldschmidt (Paris)

Anders Wandahl (Stockholm)

Associates

Lars Dovling Andersen (Aalborg)
Claude Cibils (Montpellier/Nice)
Herbert Fleischner (Vienna)
Nick Gill (Costa Rica)
Andreas Griewank (Berlin)
Michel Jambu (Nice)
Fabrizio Luccio (Pisa)
Marie-Francoise Roy (Rennes)
Michel Thera (Limoges)
Tsou Sheung Tsun (Oxford)

EC liaison :
Alice Fialowski (Budapest)

Support provided by EMS CDC

- Support for Cambodian students to study in Vietnam, Philippines, India, Malaysia.

- Support for a student from Indonesia to prepare a PhD in Pakistan.
- Support for students from Nepal to study in India, Malaysia.

http://euro-math-soc.eu/EMS-CDC/activities.php

- Contribution to *2nd African Women Mathematics workshop* of the African Mathematical Union held at AIMS (South Africa) in 2013 and to the Ibni Prize in 2014.

http://euro-math-soc.eu/EMS-CDC/activities.php

Electronic Documentation

We run workshops on electronic access in DCs and help to build up libraries.

e-Math for Africa

`http://math.golonka.org/`

Finding **O**nline **I**nformation in **M**athematics

`http://workshop.ems-cdc.org/doku.php`

`http://euro-math-soc.eu/EMS-CDC/activities.php`

Zentralblatt MATH (zbMATH)
Free access for institutions and individuals from DCs

(email to : `editor@ zentralblatt-math.org`).
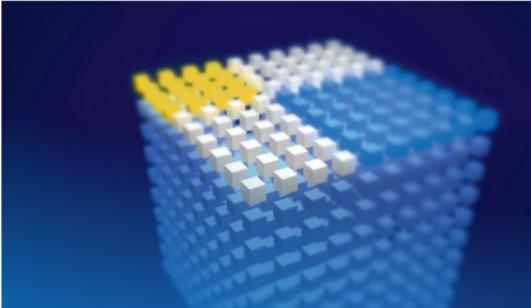
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zbmath.org

FIZ Karlsruhe   HEIDELBERG ACADEMY OF SCIENCES AND HUMANITIES   European Mathematical Society   Springer

Book Donation Program

We have moved tens of tons of books and journals, from
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South and Central America.

Emerging Regional Centres of Excellence (ERCE)

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EMS selects, endorses and helps a number of such centres to offer training to M.Sc. level to students from less developed countries in their region.

http://euro-math-soc.eu/EMS-CDC/erce.php

IMU   http://www.mathunion.org/

International Mathematical Union (IMU)

IMU > Home   Home | Contact | Search | Media Platform | Sitemap

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Publications
- Circular Letters to Adhering Organizations
- Bulletins
- IMU-Net: Electronic Newsletter
- Reports and Recommendations
- Historic IMU/ICM Digital Material: Proceedings, Videos, Books, Media Platform

Activities
- International Congress of Mathematicians (ICM)
- ICM related and other Grants
- Developing Countries (CDC)
- Mathematical Instruction (ICMI)
- Electronic Information and Communication (CEIC)
- Women in Mathematics (CWM)

Further Info
- Mathematical Societies
- Links to the Mathematical World
- Electronic World Directory of Mathematicians (EWDM)
- Friends of the International Mathematical Union (FIMU)
- The IMU Logo

IMU CDC

IMU CDC   http://www.mathunion.org/cdc/

CDC

Master Program in Mathematics in Cambodia
more details

Other CDC Supported Projects
read more

Support of Local Initiatives

African Mathematics Millenium Science Initiative (AMMSI)
A network of mathematics centers in sub-Saharian Africa.
Read more here

Mentoring African Research in Mathematics (MARM)
IMU/CDC assisted the London Mathematical Society in founding the MARM program.
Read more here

Research: Regional Studies

Mathematics in Africa: Challenges and Opportunites
Funded by the John Templeton Foundation, IMU released ....
This Report can be downloaded here

Mathematics in Latin America and Asia: Challenges and Opportunites
The CDC is currently issuing reports on the state of mathematics in Latin America and Asia.
Read more

Library Assistance Scheme

For Donors
Are you interested in donating your scientific books (mathematics or related subjects) to a library in a developing country?
Donate scientific books

For Libraries
Are you interested in receiving donated scientific books (mathematics or related subjects)?
Receive scientific books

More Highlights and Opportunities

ICTP Mathematics Fellowships

CIMPA programs supporting mathematics

Brochure about the International Mathematical Union (IMU)