

The European Mathematical Society Committee for Developing Countries

<http://ems-cdc.org>



Introduction

The **EMS-CDC** started in 2002. The committee and its members assist developing countries (DC's) as follows:

- ▶ Cooperating with local staff in developing mathematics curricula.
- ▶ Coordinating our ERCE programme.
- ▶ Cooperating with local staff for developing mathematical curricula, MSc and PhD programmes.
- ▶ Providing a platform for collaboration among different organisations acting for the promotion of mathematical knowledge.
- ▶ Mobilizing funds for researchers from DC's to attend and organise conferences in developed countries.
- ▶ Helping to build up libraries and providing electronic resources.

Examples: we have helped to fund a workshop of the Tunisian Women Mathematician's Association; we have helped to fund a Symposium in Nepal; we have helped two students from Iraq to attend a special school in Iraq; we have supported a student from Sudan, and so on...



Symposium in Nepal

Working with the Simons Foundation

In 2017, the CDC started a project with the funding of the Simons Foundation with a focus on Africa, and with the aim of promoting individual career possibilities; this will thereby help to raise the level of mathematics in African academic institutions. The program is directed to mathematicians at all career stages, and particular attention is dedicated to the promotion of female mathematicians. In particular:

- ▶ we are supporting a number of African mathematicians to undertake extended visits for research purposes;
- ▶ we are supporting a number of African PhD students to undertake collaborative research visits in order to enrich their PhD studies;
- ▶ we have issued a call to provide top-up grants for women, and for conference participation.

Other activities

- ▶ **Book Donation Programme:** Tens of tonnes of books and journals have been moved from Europe, USA and Canada, to Africa, South East Asia, and South and Central America. New donors and recipients are always welcome.
- ▶ **Electronic access:** One of our members has run a number of workshops in various DC's on electronic access to educational and research resources.
- ▶ **Nepal Algebra Project:** Members of our committee are organising and participating in a seven-year programme to raise the level of algebra expertise in Nepal. This has involved teaching a Masters course on "*Fields and Galois Theory*" at Tribhuvan University, Kirtipur each year since 2016.
- ▶ **Profile raising:** We seek to raise awareness of the needs of mathematicians in developing countries. To this end we have held roundtables and discussion groups at major mathematics conferences including ICM10 and ICM14.
- ▶ **Annual meeting:** EMS-CDC meets every year in a different European country to share experiences and projects.

Emerging Regional Centres of Excellence (ERCE)

Among the emerging economical regions there are several very good centres which can train mathematicians to the Masters level and higher.

The EMS selects, endorses and helps a number of such centres to offer training, up to MSc Level, for students from less developed countries in their region. There are currently six ERCE:

- ▶ Institute For Mathematical Research, Malaysia (ERCE 2014).
- ▶ Institute for Advanced Studies in Basic Sciences, Zanjan, Iran (ERCE 2014).
- ▶ Department of Mathematics, University of Botswana (ERCE 2016).
- ▶ Institut de Maths et de Sciences Physiques, Dangbo, Benin (ERCE 2016).
- ▶ Probability and Statistics Group, Université Cadi Ayyad, Marrakech, Morocco (ERCE 2016).
- ▶ Institute Teknologi Bandung, Indonesia (ERCE 2016).



Supporting Cambodian mathematics

Between 2005 and 2016 a number of mathematicians have helped to support and develop mathematics in Cambodia. Specifically:

- ▶ Mathematics at the Royal University Phnom Penh has been developed through the teaching of masters courses by international mathematicians. This has happened with the partnership of the Volunteer Lecturer Program.
- ▶ A number of young Cambodians have also been supported in Masters studies in Thailand, the Philippines, France, Taiwan, South Korea and Tunisia.
- ▶ Eleven young Cambodians have obtained a PhD abroad and have returned to Cambodia. PhD's were obtained in France, China, Russia, Thailand, Sweden and Mexico. One more will return in 2018, and five more are in the midst of PhD studies.

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Benefits for Developing Countries:

- ▶ Free access for institutions and individuals from DC's. Email to: editor@zentralblatt-math.org
- ▶ zbMATH-reviewers donate honoraria to the book donation programme of the EMS-CDC.
- ▶ Free access for participants during workshops and conferences.

Who are we?

Members: Leif Abrahamsson (Uppsala, Chair), Didier Aussel (Perpignan), Sophie Dabo (Lille), Hélène Esnault (Berlin), Klaus Hulek (Hannover), Francesco Pappalardi (Rome), Balazs Szendroi (Oxford), Bengt-Ove Turesson (Linköping), Fernando Rodriguez Villegas (ICTP, Trieste).

Associates: Giulia di Nunno (Oslo), Nick Gill (Pontypridd, webmaster), Anno Fino (Turin), Herbert Fleischner (Vienna), Michel Jambu (Nice), Fabrizio Luccio (Pisa), Ludovic Rifford (Nice, CIMPA), Marie-Francoise Roy (Rennes), Michel Thera (Limoges), Tsou Sheung Tsun (Oxford), Begoña Vitoriano Villanueva (Madrid), Paul Vaderlind (Stockholm), Michel Waldschmidt (Paris), Anders Wandahl (Stockholm).

EMS liaison: Mats Gyllenberg (Helsinki).