

*June 4, 2013*

## Third Call for Applications/Expression of Interest

### **Emerging Regional Centres of Excellence (EMS-ERCE)**

European Mathematical Society

The idea of the EMS-ERCE project is that the EMS selects, endorses and helps a number of emerging regional centres of excellence to offer training to M.Sc. level to students from less developed countries in their region.

The designation EMS-ERCE was awarded for the first time to the Abdus Salam School of Mathematical Sciences (ASSMS) in Lahore, Pakistan. In EMS Newsletter Issue 81 (September 2011) there are two articles about this centre. In 2013 two more centres were elected: the Centro de Investigación en Matemáticas, A.C. (CIMAT) in Guanajuato (Mexico) and the Vietnam Institute for Advanced Study in Mathematics (VIASM) in Hanoi (Vietnam).

With the success of this scheme we are now seeking more applications from developing countries. We would like to cover all regions.

With the global proliferation of emerging economies worldwide there are among developing countries varying degrees of development, just as among the developed world. In order to benefit from this situation our strategy of cooperation and help has to be adapted to the different levels of development.

Very good centres exist in emerging economies where students from the least developed regions can be trained to the master's level or higher; after the master's degree, such students could be given the option of coming to Europe to do a Ph.D. This is much more cost-effective than sending these students directly to Europe.

It is in this spirit that the Committee for Developing Countries of the European Mathematical Society (EMS-CDC) proposed a scheme of Emerging Regional Centres of Excellence (EMS-ERCE). Under this scheme, the 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. Based on experience gained with ASSMS, CIMAT and VIASM, we know that such a scheme can work well, with the backing of the EMS and provided there are institutions in the emerging economies that are actively getting involved.

This idea is meeting a positive response from a number of mathematicians from Europe, South America, South Africa and Asia.

The advantages of such a procedure are threefold:

1. It is cheaper in general to send a student to a nearby country or region.
2. The students will be less disoriented.
3. The educating institution will gain experience and prestige.

As we know, there are already a number of prestigious institutions of international renown in emerging regions. They are of course welcome to apply, if the scheme interests them. In that case, they would add luster to the scheme.

The criteria for eligibility are:

1. The centre is of good scientific standing in the region and neighboring regions.
2. It has a good track record in both research and teaching.
3. The centre has an international outlook.
4. The centre has a long-term prospective with sustainable institutional support and financial resources.
5. The centre is willing to admit and educate graduate students from less developed regions. It should have the infrastructure to do so, in particular the language of instruction should preferably be English, French or Spanish.
6. The degree aimed at is M.Sc., and Ph.D. in exceptional cases.
7. The centre is willing to welcome distinguished foreign visiting mathematicians for collaboration in research and for teaching graduate courses.
8. The centre should assist smaller centres nearby - the label should have a positive effect not only for the selected institution, but more widely for the development of mathematics in the region.

If selected, the centre will be labelled EMS-ERCE, initially for four years, and renewable subject to mutual agreement.

The advantages for the centre are:

1. The label can add prestige and visibility to the centre, which will most probably attract more and better students.
2. Often this will in turn secure funding from local and regional sources.
3. The members of CDC will be there to give support and advice whenever needed. Since this will be considered a core activity of the CDC's mission, the centre will get priority of CDC time and resources.
4. The CDC will be on hand to help those of the students who might wish to and who are capable of continuing their studies after their M.Sc.
5. The CDC will try to send experienced lecturers to give short or medium courses, e.g. by involving the Voluntary Lecturers Scheme, run by the IMU.
6. The CDC will seek European hosts for researchers from these centres for visits and/or collaborations.
7. The CDC will make available small grants for members of the centres to attend conferences, when appropriate.

Thanks to this EMS-ERCE scheme, selected institutions will provide assistance to institutions in less developed regions nearby and gain in return experience and contacts to further develop themselves. At the same time, with much less expenditure a larger number of students can receive their first graduate education, in a setting not too removed from their own. This is a practical and efficient way for mathematicians to help other mathematicians.

The members of the ERCE subcommittee of EMS-CDC are:

Giulia Di Nunno (Oslo)  
Anna Fino (Torino)  
Michel Jambu (Nice)  
Michel Thera (Limoges)  
Ramadas Ramakrishnan Trivandrum (ICTP)  
Tsou Sheung Tsun (Oxford)  
Begona Vitoriano (Madrid)  
Paul Vaderlind (Stockholm)  
Michel Waldschmidt (Paris)

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## Application or Expression of Interest

European Mathematical Society Emerging Regional Centres of Excellence

Each interested institute is asked to send us a brief description of its activities, and its suitability, together with a covering letter and supporting material, addressed to:

Giulia Di Nunno: [g.d.nunno@cma.uio.no](mailto:g.d.nunno@cma.uio.no) *or*

Tsou Sheung Tsun: [tsou@maths.ox.ac.uk](mailto:tsou@maths.ox.ac.uk) *or*

Michel Waldschmidt: [miw@math.jussieu.fr](mailto:miw@math.jussieu.fr)

Institutes are welcome to discuss their centre's profile informally with any member of the ERCE subcommittee (listed above) before submitting their applications.

The preliminary deadline for application or expression of interest is **28 February 2014**.

<http://www.euro-math-soc.eu/comm-develop.html>

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