www.mathematics-in-europe.eu

(by Ehrhard Behrends, chair of the rpa committee)

For many years the rpa committee of the EMS has been concerned with "raising the public awareness" of mathematics.

In the past, various activities have been realized, such as round-table discussions and competitions to find the best published article that raises the public awareness of mathematics.

At the beginning of 2009, some new members and a new chair were elected by the executive committee (EC) of the EMS. (The names of the present members of this committee can be found on the EMS homepage www.euro-math-soc.eu by following the links committees/committee list/Raising Public Awareness.)

It was the desire of the EC that a new rpa activity should be established: a popular mathematical web page under the auspices of the EMS. In this article we present a brief summary of the preparations to date.

Why a popular web page of the EMS?

In nearly all countries public understanding and appreciation of mathematics are far from satisfactory.

As a consequence, politicians and other shapers of public opinion generally have only a very vague idea why our field is of vital importance, and furthermore, many students hesitate to study sciences in which mathematics is essential.

Various activities to remedy this have been initiated at the national level, and it would clearly be useful to bundle these ideas in order to make rpa material more widely available and to provide a forum for the exchange of ideas.

As a side effect such a web page may help to increase the visibility of the EMS.

Preparations 1: The Brussels meeting

The first meeting at which ideas concerning the structure of such a popular webpage were discussed took place in May 2009 in Brussels, Belgium (local organizer: Thomas Bruss).



Here are the most important decisions:

- 1. The name of the web page will be <u>www.mathematics-in-europe.eu</u>. Also <u>www.math-in-europe.eu</u> and <u>www.maths-in-europe.eu</u> will lead to this page.
- 2. It will be crucial to find a sponsor in order to be able to realize this project.
- 3. All of the contents will be provided in English, and contributions written in another European language will also be included (together with an English translation).
- 4. Many ideas concerning the contents, the design, and the structure were collected. (Some details can be found below.)

Our sponsor

For many years there has existed a sponsoring agreement between the Munich RE (see www.munichre.com) and the German Mathematical Society (DMV): this support was provided to create and host the popular German-language webpage www.mathematik.de. The MR is the biggest reinsurance company in Germany.

This collaboration has been most satisfactory, and therefore it was natural to approach Munich RE again, this time with a proposal that they sponsor www.mathematics-in-europe.eu.

Negotiations came to a successful conclusion, and in December 2009 a contract between Munich RE and the EMS was signed. The Munich RE will provide annually a rather generous sum of money, which will be used to create and to run the popular EMS web page. As a partner of the EMS, the DMV is responsible for the administrative aspects of this contract.

The Kraków meeting

Soon after the contract had been signed by representatives of Munich RE, EMS, and DMV, a meeting of a subcommittee of the rpa committee was organized. It took place in Kraków, Poland, at the beginning of January 2010 (local organizer: Krzysztof Ciesielski). There, more detailed suggestions concerning content and structure, as well as a time schedule for the work of the following months, were discussed:

The structure and the contents of www.mathematics-in-europe.eu

In addition to static elements, the **starting page** will contain material that will be randomly generated every day, such as a quotation of the day, a historical reminder (e.g.: Niels Henrik Abel was born on this day in 1802), the first lines of a popular article on mathematics (together with a link to the full version), ... The main menu will contain only a few items in order to keep the page uncluttered; it will be complemented by pop-up submenus.

As far as the **technical realization** is concerned, it is recommended that the page be hosted with a content management system (CMS) based on PHP and a database (e.g., JOOMLA!).

The many ideas proposed in Brussels were grouped as follows to structure of the **contents** of the web site:

1. News: What relevant news from the mathematical community might be interesting for a general audience (Abel Prize, Fields Medals, breakthroughs, ...)?

- 2. Information: What is mathematics? examples of contemporary research, philosophy of mathematics, the mathematical landscape, the mathematical calendar (e.g., an article "Gauss published the Gauss algorithm 200 years ago"), the history of mathematics, interesting links, ...
- 3. Popularization activities: books, videos, and podcasts associated with mathematics, exhibitions, lectures, special events, survey of national rpa activities, posters, ...
- 4. Competitions: Competitions for school children and students in high school and college, a mathematical advent calendar, ...
- 5. Mathematical help (this is a working title only): first aid for school children (what should one know about the quadratic equation, etc.), mathematics in different languages (a dictionary), interesting suggestions for school teachers to be used in the classroom, ...
- 6. Mathematics as a profession: interviews with mathematicians who work in the "real world," a description of what they actually do (actuaries, mathematicians in finance, engineers, etc.)
- 7. Miscellaneous: FAQ, mathematical misconceptions, mathematical stamps, mathematical jokes, ...

The next steps

The rpa committee will have its next meeting in Istanbul in May. Until then, the raw version of www.mathematics-in-europe.eu should be prepared to the point that the web page can go online not much later. Thus, during the coming months, it will be necessary to solicit bids for writing the requisite software and for the graphic design, and as much material as possible will have to be prepared by the rpa committee members .

It must be stressed that this article should be considered as nothing more than a preliminary information about this popular web project. More details will follow later, and all EMS members in all countries are kindly invited to collaborate.