

Visions of Young Mathematics in Europe

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During the week immediately prior to the European Congress of Mathematics, one of the congress's many satellites took place at the Royal Institute of Technology (KTH) in Stockholm. This particular one differed slightly from most satellite events in that the participants of this conference were aged 14-20 and not yet active research mathematicians.

The Junior Mathematical Congress

The first Junior Mathematical Congress was held in Paris, France, in conjunction with the first ECM. Several hundred young secondary school students, mainly from France but also from several other European countries, gathered and listened to seminars from participants and from invited lecturers. As the time came for the second ECM in Budapest, the JMC was this time held in Miskolc (Northeast Hungary), again with a large international contingent present.

After the Miskolc event, some of the



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organisers realised that a periodicity of four years is much too sparse for the intended age group, as a student would be able to both start and finish secondary studies - or for that matter higher studies - between congresses and without any contact with the congress activities. Thus, the third JMC was held in Potsdam, in conjunction with the ICM in Berlin. The fourth was supposed to be held in Spain, together with the Barcelona ECM, but the intensity of arranging different activities was too high and thus in 2000, the JMC was held in Miskolc. 2002 again saw a small JMC in Miskolc, this time with mostly Hungarian participants.

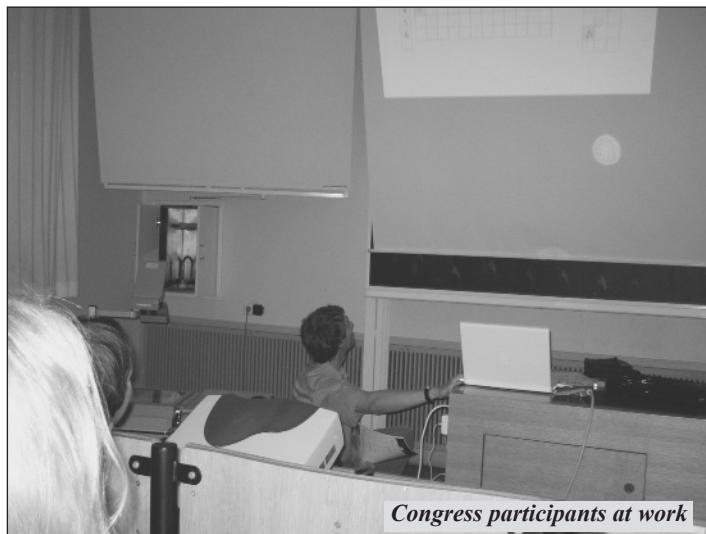
In Sweden, home of the authors of this article, the JMC was unheard of until 1998, when Mikael got involved in the preparations for the Potsdam congress during an exchange year in Germany. Two years later, the two of us both attended the fourth JMC in Miskolc.

Thrilled and excited after the experience, we were determined to seek out similar events back in Sweden, or - if need be - bring them there.

Stockholm 2004

When news that the 4ECM was to be held in Stockholm reached us three years ago, it was clear that the JMC of 2004 must also take place here - on our home turf. With the help and guidance mainly of Dr Péter Körtesi of the University of Miskolc, and of the Swedish National Centre for Mathematics Education, the Stockholm district of the Swedish Federation of Young Scientists through us started the preparations for the congress.

By the end of June 2004, after having raised EUR 30,000 in funding and gathered 40 participants from seven European countries, it was finally time. A staff of twelve, all just a little older than the participants, got everyone through the week-



Congress participants at work



... and at dinner

long event which, according to the questionnaire at the end, was a great success.

The sixth JMC was indeed a success, but it was also a lot of hard work, uncertainty and confusion. During the course of preparations and the congress itself, we experienced in a very profound way the lack of continuity, established cooperation and well-functioning communication and information networks in the young mathematics movements in Europe. It had been a difficult task at best to reach out to like-minded youngsters throughout the continent and inform them about the JMC's existence and the fact that we wanted them to attend it. Something needed to be done.

Founding a Mathematical Society

In 2000, Péter Körtesi had already formulated the idea of cooperation across national borders on a more general level, and as the work progressed, this idea matured in our discussions. A European Junior Mathematical Society would be well fitted to supply the much needed continuity between congresses by acting as formal principal of the JMC's, keeping records from earlier events and facilitating personal contact between organisers in different countries. On a more general level, the EJMS can act as a common forum and a coordinating body for several national or regional organisations within the field of young mathematics.

The EJMS would not only be an asset for congress organisers and assorted NGO's, but also, perhaps even more importantly, for the individual young mathematicians on the continent. For the teenager interested in mathematics, two of the main problems are often finding others who share their interest, and finding further mathematical stimulation and guidance. These are both problems that could hopefully be alleviated by the existence of a Pan-European network of young mathematicians. That network would also have a natural place in the greater quest to further and increase interest in mathematics among young Europeans in general.

These discussions were brought to a larger audience at the JMC this summer. Many good ideas were brought forth, by youngsters and adults alike. The culmination was reached during the closing ceremony of the congress, when the participants - young mathematicians from seven countries - unanimously declared that it was the wish of the sixth JMC that a European Junior Mathematical Society be founded as soon as possible.

Here in Stockholm, the work has now begun. The formation of a Swedish society for young mathematicians is underway in close cooperation with the Swedish Federation of Young Scientists. With a national organisation in place, we will have a starting point from which we can gather the contacts, support and funding necessary to launch the EJMS.

In closing, we would like to make a call for support to you, the mathematicians of Europe. If you feel that you can help us in any way, be it by founding a Junior Mathematical Society in your country, providing us with funds or simply sharing valuable experience with us, we urge you to contact us by e-mail at

info@jmc04.org. We believe the EJMS has great potential and hope that you will share that belief.

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Both authors were members of the 4ECM organising committee.

Max-Planck-Institut für Mathematik in den Naturwissenschaften

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