Math Year in Germany

The entire year 2008 has been officially declared "Mathematics Year" in Germany. This has created an unprecedented opportunity to work on the public's view of the subject. Although the math year is primarily a German affair, I believe that a number of the lessons we learned in preparing the year, and in promoting it to the media, may be of interest also for the U.S. and international readership of the *Notices*.

Since 2000, which was the "Year of Physics" in Germany, the German Federal Ministry of Science and Education has dedicated each year to one particular science. By now the science years have many traditional and well-tested components:

 \cdot big events, among them the opening and closing gala and the week-long "Science Summer";

• exhibitions, including a large one on the "Science Ship" that will be traveling on the Rhine, Danube, and Elbe rivers all summer;

 \cdot a major media and PR campaign.

One fourth component is new for 2008:

• Much more than in previous science years we are working to reach the schools (teachers, parents, and thus students).

The motto for the year is "Mathematics. Everything that counts!". The posters and activities for the schools declare "You're better at math than you think!"

Four partners carry the Mathematics Year 2008: Besides the Federal Ministry of Science and the "Science in Dialogue" agency (representing the German Research Foundation and the major research organizations such as the Max Planck Society), they are the Deutsche Telekom Foundation, and the German Mathematical Society (DMV). I am acting as the DMV president—it's important to have an official function when dealing with politics. We have a budget of roughly 7.5 million Euro (US\$10 million): That's a lot of money, but it's easily spent if you get into professional PR, organize big events, etc.

A professional advertising agency, Scholz & Friends, is designing the year (logo, print and web appearance), organizing the major events, and running the editorial (and campaign) office. However, unlike in previous years, we insisted on having an additional "content office" for media work: This is where we bundle expertise from the community, make sure it is represented in the year, and make sure that there's "math inside" (and that the math is correct) in the publications. The hope is that when the year is over, the mathematics content office will remain as a platform to present math to the public.

Lessons to be learned:

1. *Mathematics is multi-faceted*. It includes "learning to calculate", but also much more: It is high-tech, it is art, it is puzzles, etc. Our main message for the year is: "There is lots to discover!" People who think they don't like math haven't seen much of it.

2. *Math is difficult.* Don't try to say it's all easy. It isn't. Otherwise it wouldn't be interesting for the brightest.

3. *Don't try to teach.* There's no hope that people will know more math at the end of the year. If many people think of math as something interesting at the end of the year, we will have been very successful.

4. *Images, colors, graphics, photographs are important.* Several math calendars were produced for the year, with great images—they immediately sold out!

5. *People are important*. A subject is "abstract" for the press as long as they don't have people to talk to, to write about. For all the press materials, we are presenting and portraying mathematicians "to talk to".

6. *Talk to the press.* Press releases are ignored by the major media. You have to talk to the key editors about topics that you can present especially for them. My experience is: They are interested!

7. *Use professionals.* For us, the year is an opportunity to get help and learn from the advertising agency, but also from all the other major players. For example, the Deutsche Telekom Foundation has been funding math education projects for years, and they are also sponsoring new programs for math teacher education and development.

8. *Make it a community effort.* We are working hard to get hundreds of people from all over Germany involved, inviting people to become "math makers" for the year. This is the only way to have activities all over the country. A "top down" campaign cannot have a broad effect.

9. Use the opportunities. The physics community (represented by the German Physics Society) profited a lot from the Year of Physics 2000 and used it to build infrastructure, enlarge their membership base, and professionalize their web, print, and media appearance. Mathematicians all over Germany are working hard to grab the opportunities.

This is my personal collection of lessons and might be revised in the course of the year. Comments very welcome!

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