Amsterdam Archive

Welcome to a Dutch view of the world of mathematics. In response to the honour of having the Fifth European Congress of Mathematics in Amsterdam, the *Nieuw Archief voor Wiskunde* presents a special issue in English: the *Amsterdam Archive*. The Archive offers the usual sections, from opening *News* to the closing *Problem Section*, along with some unusual content. Try your skills on a selection of problems that have found no solutions over the past decade when posed in Dutch.

The editors are very pleased to have found a number of authors happy to prepare brief survey articles for the *Amsterdam Archive*. Please share our excitement over the latest developments in a range of fields from homology to history, and from logic to industrial mathematics. For your orientation into the Dutch world, we have included a number of specifically Dutch features, for example the prize-winning essay on the use of statistics in Dutch forensic research, which has been translated for the occasion. In addition, a laureate of many prizes gives his account of the optimization of Dutch train schedules and links it to a remarkable Russian optimization...or was it really Russian?

There is nothing more Dutch in mathematics than our own word for it, *wiskunde*, which was coined by Simon Stevin. Read how the society that is offering you this journal came to call itself *Wiskundig Genootschap* (and now *Koninklijk Wiskundig Genootschap*). As a welcoming contribution, there is a compilation of sights and museums (some as old as our very own Genootschap) that you do not want to miss while in the Netherlands. Even if the Escher Museum has been listed, the latest news is that Escher is *out*. As you may judge from the interviews in this issue, one can be a mathematician and play with Escher's work, while at the same time not particularly liking him as an artist. In contrast, there are artists that we do now particularly like (see the cover of this edition).

The most remarkable developments in mathematics in the Netherlands over the past few years are only obliquely reported in this issue, i.e. the signs of strengthening ties with society. It is good to see that research is now more firmly embedded, that students are returning to mathematics and that public awareness is growing. In 2003, mathematical research in the Netherlands was reorganized on the basis of a strategy of clustering designed by a national committee for mathematics. In May of this year (2008), the successor committee presented its strategy for a new generation of mathematical research: *Concentration and Dynamics*. What looked like a painful operation, answering to diminishing support, five years ago has now been followed up by a refreshingly self-conscious approach. An essential part of our legitimacy is given by education. We have been asking ourselves, with good reason, where all the students have gone. Finally this year, the initiatives to address this issue promise to bear fruit and lead to substantially better figures of enrolment. Perhaps it has been helpful, too, that on the horizon signs of consensus are appearing on the role and style of mathematics in secondary education.

Little explicit proof of the changes in the societal embedding of research and education appears in this special issue. What is present is the improving communication. The incoming president of the Royal Academy of Sciences reveals the kissing factor in mathematics. However, when it comes to public awareness of mathematics in the Netherlands, few people have more effectively communicated than the Math Girls; read how they rule and follow the link to their prize-winning website.

The epitome of the good spirits of 2008, which I hold to be the most important of the recent development in mathematics in the Netherlands, is clearly the arrival of the Fifth European Congress of Mathematics to Amsterdam.

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