Welcome

The International Congress of Mathematicians is without doubt the most important mathematical event in the world. Having the opportunity to organise an ICM is an unparalleled honor for a community of mathematicians. This honor has been bestowed to Spain in 2006.

The Catalan Mathematical Society (*Societat Catalana de Matemàtiques*, SCM) is proud to participate in the organisation of this Congress. The SCM president is one of the vicepresidents of the Executive Committee of the Congress, together with the president of RSME and former presidents of SEIO and SEMA. This privilege was agreed in 2002 as a recognition of the fact that the four societies RSME, SCM, SEIO and SEMA made up the Spanish IMU Committee when it was entrusted with the responsibility to organise the ICM 2006 by the General Assembly of IMU in Shanghai. At present, the Spanish IMU Committee encompasses seven societies, after the incorporation of FESPM, SEHCYT and SEIEM in 2004.

This special issue of the journal *SCM/Notícies* is dedicated to the ICM 2006 and has been designed as a homage to the Congress and as a demonstration of enthusiasm of the Catalan mathematical community. The collective response to the call for contributions to this issue has been rapid and generous. We are thus delighted to present Mathematics in Catalonia on the occasion of the ICM 2006.

This issue contains a presentation of several institutions that lead mathematical research and education in Catalonia. In addition, quantitative and qualitative information is given in the report entitled *Mathematics in Catalonia 1996–2002*, which was elaborated by the Institute for Catalan Studies and published as an article of the Institute's journal *Contributions to Science* in 2005. A brief summary of international cooperation is given, together with other aims and actions of the Catalan Mathematical Society. This offers altogether a substantial overview of the community's activity.

The institutions presented in this issue do not exhaust of course the list of centres where mathematical research, education or divulgation is made in Catalonia. Among the universities, only the three that award a degree in Mathematics are displayed here. A number of other universities exist in Catalonia, and all of them host active mathematicians. Moreover, if the scope of our survey is enlarged to the whole territory where the Catalan language is spoken and the Catalan culture is alive in its many forms, then the list of universities to be mentioned would be much longer. The reader is referred to the website of the *Institute Joan Lluís Vives* (http://www.vives.org), a network of 20 universities within the territories of Catalan culture, for complete information.

Besides the universities and the *Centre de Recerca Matemàtica* (CRM), other institutions work for Mathematics in Catalonia. In fact, a big effort is devoted to the promotion of Mathematics at schools. This task is undertaken by the SCM and also by several associations that are assembled together in the *Federació d'Entitats per a l'Ensenyament de les Matemàtiques a Catalunya* (FEEMCAT). The FEEMCAT shares some activities with the SCM, principally the ESTALMAT programme for the care of talent among mathematically gifted students aged 11 to 13, a successful initiative started by Miguel de Guzmán in 1998 in Madrid.

We certainly do not want to forget any institution deserving to be mentioned in this issue. There are many, since there are in fact many people who love Mathematics and work for its progress and divulgation. For this reason, we do not attempt to list all of them, and apologize here for any deficiency in emphasis that may have occurred.

The ICM 2006 is accompanied by a large number of satellite events (more than sixty). This is another demonstration of the importance of the Congress and its strong effect on the mathematical people and institutions, not only of Spain, but also of some of the surrounding countries. The benefit of this Congress has already been clearly perceived and is expected to become even more evident in the coming months and years.

Carles Casacuberta
SCM President

The SCM remarks that the opinions expressed and the comments made in the following pages belong solely to the authors of the corresponding articles and/or to the institutions they represent. The SCM does not necessarily share these opinions or comments.

The SCM wishes however to sincerely thank all the contributors to this special issue of *SCM/Notícies* for their prompt and effective response to the call for contributions. We apologise for the fact that, because of calendar constraints, the time given to authors for writing their contributions has been much less than the usual one. If, after all, the present issue is edited and printed is, doubtless, thanks to the effort of all of them.

Enric Ventura
Editor of *SCM/Notícies*

Catalonia and the ICM 2006

Presentation of the SCM

The Catalan Mathematical Society aims to promote all aspects of Mathematics in the territories where the Catalan language is official or normally used. It was established in 1931 as a section of the Society for the Promotion of Sciences, which had been created by the Institute for Catalan Studies (IEC). In 1986, the Society for the Promotion of Sciences split into three different societies, namely Chemistry, Mathematics, and Physics. Nowadays, the SCM is one of the 26 member societies of the IEC. With more than 1,000 individual members, most of whom are researchers or teachers at one or other level of the educational system, it is one of the most active, prestigious, dynamic and influential among the scientific and scholarly societies affiliated to the IEC.

The SCM is a member of the European Mathematical Society (EMS) since 1992. After a successful bid, it was entrusted by the EMS with organising the Third European Congress of Mathematics in Barcelona in July 2000. This was a major event, which gathered together more than 1,500 participants. The proceedings of this congress were published by Birkhäuser Verlag in the *Progress in Mathematics* series (volumes 201 and 202).

The SCM organises activities of many kinds, publishes books and journals, gives prizes, and represents the Catalan mathematical community before educational authorities and other institutions, both at home and abroad. Some of the courses and lectures organised by the SCM are aimed at researchers, while others are geared toward secondary school teachers or a general mathematical audience.

The SCM holds reciprocal agreements with several societies from outside Spain, including the American Mathematical Society, the Société Mathématique de France, and the Česká matematická společnost (Czech Mathematical Society). Several joint events have been organised with some of these institutions. In May 2005, the First Czech-Catalan Congress of Mathematics took place in Prague and gathered together more than 100 participants. The second event of this series will be held in September 2006 in Barcelona. In 2003, the SCM and the RSME jointly organised a two-day meeting on Cryptography in Barcelona. The Spanish societies RSME, SCM, SEIO and SEMA organised a major conference in Valencia in 2005, which served as an advertisement and a collaborative rehearsal for the ICM 2006.

The SCM awards an annual prize for students (the Évariste Galois prize), which is given to the author of the best research or essay on a mathematical topic, usually at a postgraduate level. The Institute for Catalan Studies also awards a biannual prize in Mathematics for the best PhD thesis written in Catalan (the Josep Teixidor prize) and an annual international prize (the Ferran Sunyer i Balaguer prize) for a mathematical monograph of an expository nature in English that presents the latest developments in an active area of research in