

## Editorial

The present issue of the Journal *Communications in Applied and Industrial Mathematics* (CAIM) contains a selection of 20 papers presented at SIMAI 2010, the 10th Congress of SIMAI, the Italian Society for Applied and Industrial Mathematics. SIMAI 2010 was organized in cooperation with SEMA (Spanish Society for Applied Mathematics / Sociedad Española de Matemática Aplicada).

The conference was held in Cagliari, Italy from June 21 to June 25, 2010, hosted by the School of Architecture at the University of Cagliari, located in the fascinating historic quarter of Castello, in the lively center of the town, while the Engineering Faculty hosted the Opening Session of the Conference.

Since its inception in 1992, the SIMAI biannual congress represents a key occasion to promote and stimulate interdisciplinary research in applied mathematics and to foster interactions with industry. At SIMAI 2010, eight plenary lectures covered a wide range of topics, varying from familiar areas of applied analysis, numerical modeling, scientific computing, and computational geophysics to new interdisciplinary subjects such as computational biology and medicine. They were complemented by a traditional feature of SIMAI congresses, the extensive program of minisimposia that covered most of the many diverse areas and applications of applied mathematics. About 400 communications were delivered by more than 350 scientists from Italy, Spain and all over the world. The detailed SIMAI 2010 scientific program can be found at the conference website <http://2010.simai.eu> where also the conference book of abstracts can be downloaded.

Furthermore, the program included a roundtable on Engineering Mathematics moderated by the President of SIMAI, Nicola Bellomo and myself. Undergraduate programs in Engineering Mathematics have been created since about ten years in Italy. The aim of this roundtable was to discuss their current status and future perspective: Luca Formaggia (Milano - Politecnico), Paolo Podio-Guidugli (Roma - Tor Vergata), Luigi Preziosi (Torino - Politecnico), and Bruno Rubino (L'Aquila), offered a stimulating view on how these programs may create a new generation of scientist fostering an active dialogue with industry. On the same session, Paola Antonietti, the 2008 awardee of the Fausto Saleri Prize was invited to illustrate the out-

come of the industrial mathematics research project funded through this SIMAI initiative.

Participation to SIMAI 2010 was also an opportunity for young scientists to meet with their peers, present their results and build long-lasting scientific relationships. In 2010, we offered the option for younger scientists to volunteer for some technical tasks during the meeting in exchange for accommodation support. We were able to provide support to 26 applicants. They come from Italy, Spain Europe and overseas and were selected by a committee chaired by the President of SIMAI, Nicola Bellomo.

After the conference, all participants who presented a lecture at the SIMAI 2010 were invited to submit a full paper to CAIM. In total, about 40 papers have been accepted for publication, of which 20 are published in the present issue. A second one will be published shortly, as the first issue in the second year of CAIM. We take this opportunity to thank all the members of the Editorial Board as well as all the referees that have been involved in the selection procedure for their hard and diligent work. We are grateful to those members of the Organizing Committee of SIMAI 2010 who also contributed to this process, Alessandro Chessa, Antonio Cazzani, and Sebastiano Seatzu.

In conclusion, it is our pleasure to warmly thank all the people and organizations that made SIMAI 2010 possible. The complete list of sponsors and Institutions is included in this issue. A special thank goes to the international Scientific Committee, co-chaired by the SEMA and SIMAI Presidents, Carlos Cendon and Nicola Bellomo. We are grateful to the members of this committee for their work, and for their useful and insightful advices. While the choice of plenary lecturers was in the hands of the Scientific Committee, the form of the rest of the scientific program as well as all organizational issues was a responsibility of the Organizing Committee of the conference, whose members I would like to thank for their effort and dedication. They did a great job, both in terms of quantity and quality and we were able to keep each and every deadline, thanks to their commitment and timeliness.

We are grateful to Gianmauro Cuccuru who handled all the matters related to the website of the conference, and to the team at Politecnico di Torino for typesetting the conference book of abstracts. We would also like to gratefully acknowledge the help and suggestions of Enrico De Bernardis and Luigia Puccio who shared with us their experience in organizing the SIMAI congresses in the past. CRS4, the interdisciplinary research center based in the Scientific and Technological Park of Sardinia, not only invited all the participants to the Conference welcome buffet lunch in the beautiful terrace of the Ghetto degli Ebrei, but also contributed to the success of the

event by offering continuous technical and organizational assistance to us.

We are also grateful to our professional meeting organizers, Cristina Bodano, Simona Casu, Marija Latin and to the meeting manager Maria Teresa Sotgiu at the Kassiopea group. Many other people put effort in the organization of the event and, although we cannot name them all, they all contributed to the success of the conference.

I feel confident that the friendly atmosphere and the beauty of Cagliari will be long remembered by all participants. We hope now that you as a reader of this Journal will enjoy reading all the inspiring contributions to the second Issue of Communications in Applied and Industrial Mathematics.

**Giorgio Fotia,**

On behalf of the SIMAI 2010 organizing committee