Letter from the editors

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Every new year brings us a certain set of anniversaries: of facts and incidents that are more or less important for mathematics and its personages. One does not always have the skill, time and space to celebrate in a timely way even the most important ones, but some of them just cannot be neglected. This is especially true for us, who insist on a constant and significant presence of the mathematical world in the society at large.

This year, 2018, brings us back to an inauspicious date for our Italy, a date that had devastating effects and that we intend not to forget: 80 years have passed since the signing of the “Manifesto of the race”, the birth of Italian official anti-Semitism. What were its awful contents, what were its consequences, in particular on schools, what was the effect it had on some representatives of the scientific world? This is what we intend to address with our dossier about the 1938 Italian racial laws. The dossier consists of a substantial paper by **Angelo Guerraggio** and **Pietro Nastasi**, “It was the summer of 1938... that of anti-Jewish laws”, accompanied by some reflections on “An Italian shame” and a book review by **Luca Alberini**. The reader will find a general survey of those facts, followed by a number of in-depth accounts about specific persons: the sincere friendship between Guido Fubini and Tullio Levi-Civita; the vicissitudes of Guido Castelnuovo’s daughters, Gina and Emma; the fate of naturalist Enrica Calabresi, who took her own life in Santa

Verdiana rather than being deported to Auschwitz; the case of Enrico Volterra and his difficult choice of a place of exile. Difficult lives, which faced tragic challenges and allow us not to forget all the others who have found no place here.

But the same year, 2018, also marks the third centenary of the birth of a famous woman mathematician: Maria Gaetana Agnesi. There are few women who, in the past, played an important role in mathematics: this is already a good reason not to let the anniversary go unnoticed. If we add that her work represents a high point of the dissemination of science, where mathematical terminology in Italian was fixed for the first time, and if, moreover, we remember her outstanding contributions to the society of her time, then we need a whole article about all of this: “A protagonist of the eighteenth-century mathematics: Maria Gaetana Agnesi” by **Renato Betti** and **Jacopo De Tullio**, with three appendices about her works and the algebraic curve that is associated with her name: the *versiera*.

What else will the reader find in this issue? We have the fourth instalment in the series “Communicating mathematics in Europe” that **Andrea Capozucca** is devoting to the most original aspects of mathematics discussion, both about teaching and popular mathematics; this time, we find an interview with the great mathematical writer **Simon Singh**, who has the merit and skill of making mathematics a popular reading matter. Then we remember someone who has been assiduously present in the life of our discipline and recently passed away: “A three-part recollection of Vinicio Villani” by **Giuseppe Accascina** and **Maurizio Berni**, who were close to him for different reasons and at different times. A former president of the Italian Mathematical Union, Villani was always impatient with traditional teaching methods, which tended to trivialise notions that are seemingly simple but are actually full of problematic aspects.

Finally, a contribution about a characteristic theme of our time: is it true that the wide availability of observed data and the vast computing power make it possible to overcome theoretical models? Do they allow us to replace the usual process through conjectures and proofs with which science has made us familiar? **Hykel Hosni**, a philosopher

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of science, and **Angelo Vulpiani**, a theoretical physicist, discuss this in “Data science and the art of modelling”. We must not give in to easy enthusiasm, the authors conclude, but you have to read it all.

Translated from the Italian by Daniele A. Gewurz

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Settimo Termini was professor of Theoretical Computer Science at the Universities of Palermo and Perugia, directing—from 2002 to 2009—the Istituto di Cibernetica “Eduardo Caianiello” of the Italian National Research Council (CNR) in Naples. A theoretical physicist by training, he has been mainly concerned with problems raised by the treatment of incomplete and revisable information in complex systems and, recently, with the connections among scientific

research, innovation and economic development. His work forms the basis of the “Theory of measures of fuzziness”. Fellow of the International Fuzzy Systems Association (IFSA) and the Accademia Nazionale di Scienze Lettere ed Arti, his books include: *Aspects of Vagueness* (with H. J. Skala and E. Trillas; Kluwer—now Springer—1984); *Imagination and Rigor* (Springer, 2006); *Contro il declino* (with Pietro Greco; Codice, 2007); *On Fuzziness* (with R. Seising, E. Trillas and C. Moraga; Springer 2010).