

Letter from the editors

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This issue of Lettera Matematica International Edition is distinguished by the almost ubiquitous presence of a form of "internationality" involving both the problems of science and the scientific community. Of course, this is not new: science is by its nature free from national constraints, its problems know no borders, and they periodically reappear and are solved wherever it is necessary. A political or ideological relevance can only artificially be conferred on it. Thus, when the historical moment creates situations in which it is necessary to overcome limitations and isolations due to questions that are in no way scientific, there always appears some figure whose activity testifies to how the consonance among those who practice science - the famous scientific community – is quite natural and spontaneous. "From Europe to Brazil: Gleb Wataghin and the scientists' mutual cooperation in times of intolerance and war" by Luciana Vieira Souza da Silva and Bruno Bontempi Jr of the University of São Paulo can be read in this sense, while "About Nuclear Italy: an International History of Italian Nuclear Policies during the Cold War" by Elisabetta Bini presents a volume containing analyses of the different ways in which economics and technological and scientific exchanges, in addition to social and cultural movements, may condition the civilian and military policies of a country.

Translated from the Italian by Daniele A. Gewurz.

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Next in this international setting, you will find Germany, first with the second part of the analysis by **Francesco Boria** and **Barbara Rapaccini** (from the Terni section of Mathesis): "Education and research: the development of German physics in the nineteenth century", then with two articles on the occasion of the second centenary of the birth of Karl Marx: on the one hand, **Andrea Ricci** from the University of Urbino, in "The mathematics of Marx", retraces the content of the German thinker's mathematical manuscripts; on the other hand **Giuseppe Travaglini**, also of the University of Urbino, in "Marx and the value" reconstructs some key aspects of his political economy.

Then we move on to Asia, to discover "Indeterminate linear problems from Asia to Europe", where **Eva Caianiello** examines the forerunners of those that we now call "Chinese (remainder) problems", with their specific modes of statement and solution.

We find next a great foreign mathematician associated with Italy, in "Monge and Italy" by **Luigi Pepe** of the University of Ferrara: more than for his results or students, his relation to Italy is due to the political events that saw him alongside Napoleon Bonaparte during various campaigns and also—alas—the looting of important pieces of our artistic patrimony. Could this too be a demonstration of how international culture is?

The fifth instalment of the series "Communicating mathematics in Europe" by **Andrea Capozucca**, teacher at Recanati and tireless creator and organiser of mathematical events, bring us to the arts of communicating and popularising mathematics. In his company we meet in Pisa Eduardo Sáenz de Cabezón, a well-known Spanish mathematician who works in mathematics communication at all levels, especially with the general public and the mass media.

We have next two book reviews. The first one, a review of *Giovanni Battista Guccia: Pioneer of International Cooperation in Mathematics* by Benedetto Bongiorno and Guillermo P. Curbera (Springer, 2018) is the biography of the founder of the Circolo matematico di Palermo. According to the reviewer **Settimo Termini**, the book compels us to reflect on how to deal with many modern problems. The



second review takes a look at the two-volume *Matematica* in *Aristotele* by Silvio Maracchia (Nuova Cultura, 2017), which **Claudio Lanzi** analyses from the point of view of the material that it makes available to investigate the issues underlying our logical thinking.

Finally, last in this issue but not in our memory, "Remembering Carlo Bernardini", a tribute by **Settimo Termini** to the internationally renowned physicist and friend of the PRISTEM, who passed away in June 2018. We remember his passion for communication, his love for university, his dedication to teaching, his desire for civil development and his disappointment with its shortcomings, sometimes expressed with acute and mordant comments but always with an eye to making people aware of the problems.

Enjoy your reading!

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Renato Betti is a former full professor of geometry at the Politecnico di Milano. His research concerns, on the one hand, category theory and its applications to algebra and geometry, and on the other, the historic-logic reconstruction of mathematical facts. He is a co-director of *Lettera Matematica PRISTEM* and a member of the Accademia Nazionale Virgiliana in Mantua.



Angelo Guerraggio is lecturer of general mathematics at the Università dell'Insubria in Varese and at the Bocconi University in Milan, where he directs the Research Centre PRISTEM (Progetto RIcerche SToriche E Metodologiche), founded by him in 1987. His research interests range from non-linear programming to the history of mathematics, with particular reference to the Italian post-unification period. In 2007 he was appointed by the Italian Government national representative for the

committees of the 7th Framework Programme of the European Union.



Settimo Termini has been 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 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, on the connections among scientific research, innovation and eco-

nomic development. His work is at the basis of the "Theory of measures of fuzziness". He is a fellow of the International Fuzzy Systems Association (IFSA), the Accademia Nazionale di Scienze Lettere ed Arti, and President of Marina Diana Mercurio Association. His publications include the books: *Aspects of Vagueness* (with Heinz J. Skala and Enric Trillas; Kluwer, 1984); *Imagination and Rigor* (Springer, 2006); *Contro il declino* (with Pietro Greco; Codice, 2007); *Memoria e Progetto* (with Pietro Greco; GEM, 2010).

