

# europ physics news



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## Viewpoint

### A state of emergency

At the meeting of Council in Romania on 22 and 23 March 1973, a state of emergency was declared within the European Physical Society. After hearing of the large financial deficit on the final account for 1972 and of the worsening situation for 1973, Council unanimously accepted a motion proposed by L. A. A. Thomas that there should be a task group appointed to carry out an investigation. The task group comprises: the new Secretary elected in Romania, J. J. Went; the new Treasurer, O. S. Heavens; H. Friedrich; and M. Guenin. C. M. Braams and K. Ganzhorn, members of the Executive Committee, will act as advisers, and the final report will be prepared in co-operation with the President, H. B. G. Casimir.

When the task group has completed the investigation of the financial affairs and relevant administrative matters of the European Physical Society, a report will be presented to the next meeting of the Executive Committee on 5 June 1973. The Executive Committee will immediately take the necessary action that lies within its powers and will refer to the November 1973 meeting of Council any matters which require discussion and approval by Council.

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## The Italian Physical Society and "Il Nuovo Cimento"

A. Alberigi Quaranta, Pisa

The foundation of the Italian Physical Society, Società Italiana di Fisica (SIF), took place in 1897, and was linked closely with the monthly journal *Il Nuovo Cimento*. The subheading *Organo della Società Italiana di Fisica* (Organ of the Italian Physical Society) first appeared in the January issue of 1897.

It is, therefore, impossible to consider the history of the Italian Physical Society without expounding, although briefly, the history of *Il Nuovo Cimento*, because of the great influence that this journal has had on physics in Italy for more than a century.

*Il Nuovo Cimento* was founded in 1855, and is the only physics journal published in Italy up to the present time. The scientists who founded *Il Nuovo Cimento* also sponsored, in 1844, another publication named *Il Cimento* which had a short and tormented life, because of the political events in which the scientists who founded it were protagonists. It is important to remember that the group of scientists who founded *Il Cimento* originally, and then went on to create *Il Nuovo Cimento*, were affiliated to the University of Pisa; during the first half of the nineteenth century, this was one of the most liberal intellectual centres on the Italian peninsula. This liberalism arose from the 'enlightenment' which distinguished the government of the Grand Dukes of Tuscany and which permitted the fostering of scientific research among men who would be regarded as political progressives. In fact, the group of scientists who organized *Il Cimento* also comprised, in 1848, the military organization called Tuscan University Battalion; this was commanded by the illustrious physicist Mossotti and fought gloriously during the war for

Italian Independence. Mossotti was cited for bravery in the battles of Curtatone and Montanara in which died Pilla, one of the other founders of *Il Cimento*. Scientific activity was then regarded as a liberal activity in itself and those who engaged in it were espousing liberal ideas and considered to be engaged in a political activity supposed to lead to a more liberal system of government for the entire peninsula. It was under these political circumstances that *Il Cimento* ceased to appear for some years because of the reactions caused by the military defeat of the first war of independence. In 1855, it resumed imperceptibly under the new name of *Il Nuovo Cimento*.

In 1894, Battelli, one of the three founders of the Italian Physical Society, came to Pisa to succeed Riccardo Felici (1819-1902) in the chair of physics of the University. Felici was a pupil of Mossotti, in company of whom he had fought in 1848 at Curtatone, and of Matteucci, whom he had succeeded in the chair of experimental physics of the University of Pisa in 1849. Felici, furthermore, was successful in keeping *Il Nuovo Cimento* alive by personally taking it up; in 1897, he was the sole proprietor of the journal. According to Polvani: 'An important declaration was contained in the circular letter in which the promoters of the Italian Physical Society called upon Italian physicists to join: Prof. Felici... hands over the journal to the Society provided the Society will consider it as the official organ and the President of the Society will be one of the directors.'

Thanks to Felici, the only Italian physical journal was kept alive and he gave it to the Italian Physical

Society, which acclaimed him Honorary President.

Anyhow, the foundation of the Italian Physical Society was mainly attributable to Battelli, and, very soon, most Italian physicists adhered to it.

In the issue of *Il Nuovo Cimento* in January 1897, a short, unsigned notice, presumably written by Battelli himself, appeared; the aims of the newly founded Society were stated. This notice began with the following words: 'We are glad to announce to our readers that the establishment of an Italian Physical Society is already ensured. We are convinced that, by facilitating the relations and the discussions between scholars of physics in Italy, the Society will effectively contribute to the growth of science and to the propagation of knowledge. It suffices to recall that the results of this contribution will be productive and that Societies have been founded abroad with the same purposes.'

The Italian Physical Society lived and grew, unwaveringly faithful to the spirit of its founders, despite the deep transformations connected with the historical development of physics and of Italy. In the early decades of this century the life of the Society was quiet, and international relations were kept up mainly through its most eminent fellows. Only in the thirties, under the stimulus of some distinguished masters, such as Corbino and Garbasso, a new generation of physicists was more active and numerous than the preceding one. These physicists accelerated the development of physics in Italy and, therefore, of the Italian Physical Society, by introducing it into the international field.

Indeed from 1947 onwards, the Italian Physical Society grew quantitatively and qualitatively. The number of the members increased to about 1000, and the Society validly participated in the world-wide framework of physical Societies of the various countries.

This development of the Italian Physical Society was mirrored in the development of *Il Nuovo Cimento*.

From 1895 to the beginning of the Second World War, *Il Nuovo Cimento* maintained its initial characteristics and remained a national journal, as was the case with physics journals of other nations, with some exceptions in Germany and Great Britain. *Il Nuovo Cimento* has published most of the works of Italian physicists who have contributed to the development of physics; that is the historical importance of the magazine. Physicists

like Amici, Matteucci, Mossotti, Levi-Civita, Ricci-Curbastro, Pacinotti, Volterra and, finally, Enrico Fermi and his co-workers published articles in the journal. In Italy, *Il Nuovo Cimento* has assumed the responsibility of reflecting, from the historical point of view, the scientific activity of the State. Italy has not risen, technologically, economically and politically, to the heights of other more advanced states such as France, Great Britain, and Germany, but it has maintained the spirit of its scientists, the first of whom was Galileo Galilei.

During the Second World War, *Il Nuovo Cimento* ceased publication for all practical purposes and resumed, with a new character, in 1947. It is now open to international scientific contributors and publishes, to a large extent, articles written in foreign languages.

Because of the lack of knowledge of the Italian language in the world, more and more Italian physicists are now publishing their articles in English, so that they make themselves understood by physicists all over the world. It is due to the efforts of Giovanni Polvani, former President of the Italian Physical Society, that the journal *Il Nuovo Cimento* took its new modern and international form. The astonishing development of the journal since 1947 is reflected in the fact that it increased from 290 pages in 1947 to 10 000 pages in 1971. Today, *Il Nuovo Cimento* has become an international journal which publishes articles from all over the world, for example, from Australia, Poland, USSR, India and Japan. It is the intention of the Italian Physical Society to maintain this international character of the journal. In fact, it has recently created an Editorial Board composed of famous scientists from 21 nations so emphasizing the international structure of the publication.

In 1969, the growth induced the Society to start issuing the *Lettere al Nuovo Cimento* in order to give to the Italian and foreign collaborators a new means of scientific information. While maintaining a high scientific level, *Lettere al Nuovo Cimento* could better satisfy the requirements of speed and punctuality which are characteristic of this important branch of the physics literature. In the same year, *La Rivista del Nuovo Cimento* is a cultural tool, useful to the physicist in his work as a specialist, yet, at the same time, a means of favouring openings and contacts between the different fields of research.

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