



The 44th SISFA Congress in Arcetri

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Abstract. From September 17 to 20, 2024, the annual Congress of the Italian Society of Historians of Physics and Astronomy (SISFA) was held at the Department of Physics and Astronomy of the University of Florence and the INAF-Arcetri Astrophysical Observatory. The Congress was an excellent example of the cultural activities that the “Colle di Galileo” memorandum of understanding (signed by CNR, INAF, INFN, and UNIFI) aims to promote and enhance.

Keywords: history of physics, history of astronomy, scientific museums, ancient libraries, historical archives.

The Italian Society of Historians of Physics and Astronomy (SISFA) held its 44th National Congress on Arcetri Hill from September 17 to 20, 2024, with 87 participants. The sessions took place partly in the “Garbasso” building of the Department of Physics and Astronomy and partly in the Library of the Arcetri Astrophysical Observatory.

The Society, founded in 1999, continues the work of the previous National Coordination Group for the History of Physics, established in 1982 within the CNR. SISFA congresses provide a platform for research into the history of physics and astronomy, as well as educational aspects (with significant contributions from secondary school teachers), scientific museums, archives, libraries, and collections of physics and astronomy instruments. SISFA’s work is also characterized by the uninterrupted series of annual congresses held since 1981, evidenced by the approximately thirty volumes of congress proceedings published and the nearly one thousand contributions these volumes offer across various fields of the history of physics and astronomy. The research carried out has also found space in numerous articles and volumes published by both Italian and international publishers.

In this year’s edition, given the special anniversaries that occurred in 2024, there were several thematic sessions:

- From Information to Artificial Intelligence: Over 100 Years of Communication and Computation, to mark the 150th anniversary of the birth of Guglielmo Marconi;
- From Quantum Statistics to Condensed Matter Physics, to celebrate the centenary of Bose-Einstein statistics;
- Edwin Hubble and the Birth of Modern Cosmology;
- In Memory of Giuseppe Occhialini and Bruno Rossi, to honor two leading figures in Florentine physics during the 1920s and 1930s;

- 100 Years Since the Founding of the University of Florence.

The SISFA 2024 Congress also paid special attention to young scholars, awarding two graduate prizes. The SISFA 2024 prize was awarded to Matteo Boni from the University of Bologna for his thesis. *La divulgazione dell'astronomia in Italia: il caso del passaggio della Cometa di Halley*; the graduate prize dedicated to the memory of Prof. Anna Maria Cartacci, jointly established by the Department of Physics and Astronomy of the University of Florence and the Florence section of INFN, was awarded to Stefano Campagnaro from the University of Milan for his thesis *Meccanica Quantistica per la scuola superiore: elaborazione e sperimentazione di materiali didattici basati sulla ricerca*.

Furthermore, the Society paid tribute during the congress to Professor Giorgio Dragoni, an eminent professor from the “Augusto Righi” Department of Physics and Astronomy at the University of Bologna and the second president of the National Coordination Group for the History of Physics from 1986 to 1994, who passed away in early September. The tribute was delivered by Pasquale Tucci and Fabio Bevilacqua.

The organization of the Congress in Arcetri allowed the direct involvement of both the University and the Observatory, which collaborated perfectly. The Congress offers an excellent example of the cultural activities that the “Colle di Gali-



leo” memorandum of understanding (signed by CNR, INAF, INFN, and UNIFI) aims to promote. The congress began with invited talks focusing on the history of the institutions located on the hill: the Observatory, which recently celebrated its 150th anniversary, the University of Florence, currently celebrating its 100th anniversary (paying special attention to the “Garbasso” Institute of Physics, inaugurated in 1921), and the slightly younger National Institute of Optics.

The cultural and social activities collateral to the Congress were of great interest to the participants. On the evening before the start of the Congress, a welcome aperitif was organized at Villa Galileo, immersing the attendees in the enchanting atmosphere of the hill. A documentary on Giuseppe Occhialini entitled *Giù nell’abisso, fino alle stelle – Le scoperte di uno scienziato, le esplorazioni di uno speleologo*, was played at the end of the first day, 30 years after his passing, in the presence of the director, Roberto Tronconi. On the evening of Thursday, September 19, participants had the opportunity to visit other sites of the educational path in the park: the accelerator KN3000 rooms in the Garbasso building, with a historical overview starting from Bruno Rossi’s experiments on cosmic rays to LABEC’s applied physics, a tour of the National Institute of Optics, where the history and future perspectives of optical research were illustrated, and a visit to the Observatory, particularly the Amici telescope dome. Additionally, maestro Marco Padovani, astrophysicist and pianist, gave a highly appreciated concert in the Observatory Library, playing the piano that Albert Einstein gave his sister Maja in 1931.