

Handling with Pontremoli's memory at the Institute of Physics in Milan during the Fascist regime

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Abstract: After his disappearing in the Barents Sea on May 25th, 1928 during the polar expedition aboard the *Italia* airship and the subsequent declaration of his death, Aldo Pontremoli was the object of commemorations and other actions in favour of the preservation of his memory at the Royal University of Milan: the dedication of a bust and a plaque in his memory in 1930, the establishment of a scholarship named after him in 1931, and the dedication of the Institute of Physics in 1932. The Institute of Physics founded by Pontremoli in 1924, under the new direction of Giovanni Polvani (who was particularly active in the abovementioned actions), underwent considerable changes that led to a substantial transformation of the teaching and research activities. The shipwreck and the subsequent controversies related to the rescue operations of the survivors had, instead, the effect of a mostly unwanted fading of Pontremoli's name from the written memoirs in the context of an embarrassing event for the Fascist regime. The suspension of the scholarship named after Pontremoli because of the racial laws in 1938 led to a further fading of the memory of Pontremoli in a climate of acquiescence towards the Fascist regime also implemented in the Institute of Physics.

Keywords: Palestine, Financial sector, CGE models.

1. Aldo Pontremoli

Aldo Pontremoli¹ was the founder of the first Institute of Physics at the Royal University of Milan in 1924. He was born in Milan on January 19th, 1896 in a prominent Jewish family. His maternal grandfather was the economist and politician Luigi Luzzatti; this fact favored Pontremoli's connections with the financial and industrial players in Milan in his plans to carry out cutting-edge projects in the field of applied physics.

He studied first at the Royal Technical High School in Milan and, after fighting as a volunteer in the first World War, he graduated in Physics at Rome University with Orso Mario Corbino. He later went to the Cavendish laboratory in Cambridge to train in atomic and nuclear physics in Ernest Rutherford's team. Back in Rome, he studied

¹ A biography of Aldo Pontremoli can be found in (Gariboldi 2015) and (Gariboldi 2018).

problems concerning electrodynamics and the structure of matter in an old quantum theoretical context.

In 1924, consulted for an opinion, Corbino proposed Pontremoli as a professor of Complementary Physics² in the newly established Royal University of Milan where he established in a short time the Institute of Complementary Physics (R. Università degli Studi di Milano 1927) with a well-equipped radiology laboratory. In 1926, Enrico Fermi, Enrico Persico and Pontremoli succeeded in the first public competition in Italy for a chair of Theoretical Physics.

In 1927, Umberto Nobile invited Pontremoli to join him next year in the polar expedition on board the *Italia* airship³ and to take care of the scientific experiments together with other two scientists: František Běhounek and Finn Malmgren. Besides the undeniable political aspects of Italy as a leading country in the exploration of the Arctic and the competition between the supporters of the use of airships (such as Nobile) and those of planes, it must be highlighted the importance of the wide range of scientific phenomena to be studied in a mostly unknown environment: exploration and mapping of unexplored territories, Earth's magnetic and gravitational fields, atmospheric electricity, penetrating radiation, transmission of radio-waves in the arctic atmosphere, meteorology and oceanography (Nobile 1929). The expedition left from the outskirts of Milan on April 15th, 1928 and started his explorations from the Italian base in the Svalbard islands on May 11th. On May 25th, during the third exploration the airship suddenly lost altitude and hit the pack. Ten people were thrown onto the pack while the other six ones, including Pontremoli, disappeared with the airship that had quickly regained altitude. The airship most probably sank into the Sea of Barents and was never found.

2. Pontremoli's memory in the "red tent" memorialistic literature

If the accident on the pack was a tragic fact in itself, the international rescue operations gave birth to the epic narrations of the "red tent" and caused many controversies, mainly on Nobile's attitude, both in Italy and abroad, in particular in Norway where the negative reactions were supported by Roald Amundsen who had a deep personal dislike for Nobile.

The rescue operations lasted until September 1928. Even if the six people disappeared on board the airship were most reasonably dead before or during the hostile arctic winter, two other attempts to find any possible survivor were made in 1929. Pontremoli was officially declared dead in 1929.

The memorialistic literature on the expedition flourished with more than ten books entirely devoted to it written by the survivors (Běhounek 1929, Biagi 1929, Nobile 1930, Nobile 1945, Nobile 1969, Nobile 1987, Trojani 1964), (Viglieri 1929) or by the

² Milan, Centro APICE, Archivio Storico dell'Università degli Studi di Milano (ASUSM), series 7, title 9, personnel file n. 2497 (Pontremoli): rector's decree n. 57, September 22nd, 1924.

³ ASUSM, s. 7, t. 9, personnel file n. 2497 (Pontremoli): letter from Umberto Nobile to Baldo Rossi, January 17th, 1928; letter from Baldo Rossi to Aldo Pontremoli, February 28th, 1928.

rescuers (Albertini 1929, Giudici 1928, Samoilowitsch 1929, Tomaselli 1929), with a particular attention towards the “red tent” epic events and the rescue operations.

The role played by Pontremoli in the expedition, in particular as for his scientific activity, is mostly ignored. Since he was not among the survivors his name could not benefit from the media exposure due to the “red tent” episode. Pontremoli’s name therefore did not fit in the people’s memory and he was easily forgotten, if ever known, by the Italian population at large. To our knowledge, no monument was raised in his memory in Italy and only two streets are named after him, in Andria and in Gela, that is in two cities which had moreover no connection at all with his personal history.

3. Pontremoli’s memory at the University of Milan

With the official statement of Pontremoli’s death, the Royal University of Milan was authorised to replace him with another professor. The Faculty of Sciences voted to call Giovanni Polvani from the University of Bari as professor of Experimental Physics.⁴ Polvani became the new director of the Institute of Physics up to 1966.

To commemorate Pontremoli’s memory in the most appropriate way, the University established a special committee,⁵ with the rector Baldo Rossi, Livio Cambi, Polvani, Enzo Pugno Vanoni, Emilio Bianchi (Brera Astronomical Observatory), and Federico Jarach. Besides various commemorative ceremonies, the committee planned to make build a plaque and a bust and to name the radiology laboratory after Pontremoli.

A marble plaque in memory of Pontremoli was inaugurated on June 7th, 1930 by the rector with a commemorative speech given by the dean of the Faculty of Sciences, Gian Antonio Maggi.

A bronze bust was inaugurated in the university’s aula magna during the rector’s inaugural speech of the 1930-31 academic year. Both the plaque and the bust are now on exhibition in the hall of the Department of Physics “Aldo Pontremoli”.

To our knowledge no document testifies that the naming of the radiology laboratory after Pontremoli ever happened. The Institute of Physics was instead named after Pontremoli in 1932.⁶ In 1980, with the transformation of university institutes into departments due to a reform of the structure of Italian universities, the naming went forgotten. In view of the ninetieth anniversary of the polar expedition, in 2017 the Department of Physics voted in favour of being named after Pontremoli. This decision became official with the rector’s decree on December 13th, 2017.

⁴ ASUSM: s. 1.4.4., u. 2: Minutes of the meetings of the Faculty of Sciences Council, October 29th, 1929.

⁵ ASUSM: s. 7, t. 14, a.u. 40: Onoranze al prof. Aldo Pontremoli.

⁶ ASUSM: s. 1.4.4., u. 2: Minutes of the meetings of the Faculty of Sciences Council, August 2nd, 1932.

4. The “Aldo Pontremoli” scholarship

In 1931, Pontremoli’s mother, Lucia Luzzatti, decided to honour her son’s memory with a donation to financially support a scholarship⁷ for one student of the Institute of Physics. Polvani and the dean of the Faculty of Sciences cooperated with Mrs Luzzatti in drafting of the donation agreement which was signed in Rome on April 29th, 1931.⁸ After some bureaucratic steps, the king Vittorio Emanuele III signed the royal decree on August 14th, 1931.⁹ The rector was therefore authorized to accept the donation¹⁰: a yearly scholarship of 2,500 lire was established and financed by the donation of government bonds, for a total of 50,000 lire, with coupons with an annual interest of 5%.

In 1932, the first commission awarded the “Aldo Pontremoli” scholarship to Olga Bertoli who would have been the first woman graduating in Physics in Milan. A second commission was named in 1933 but a lack of documents does not allow us to know if the scholarship was ever awarded that year. The same commission was named in late 1933 and awarded the scholarship in 1934 to a student whose name is unknown. No documents concerning the scholarship, nor the awarding commission are known for 1935. In 1936 the scholarship was temporarily “suspended in accordance with the general provisions in force”,¹¹ which were but not explicitly specified. In 1937 the scholarship was restored and awarded, for the last time, to Vanna Tongiorgi.

The 1938 Italian racial laws were of no immediate concern for the Institute of Physics since it did not host any Jewish member nor student, whereas it caused instead the expulsion from the Royal University of Milan of nine professors and five assistants, not to mention new discriminatory regulations against the Jewish students.

Even if the Italian racial laws only concerned the living Jews, they had also the result of suspend the payment of the “Aldo Pontremoli” scholarship. Since the Italian racial laws included a number of *disorganic* exceptions, their actual application in the universities raised a series of problems whose solution was demanded to the Ministry of National Education. In the case under consideration, the Ministry was asked if a university could be authorized to accept a donation from a Jew or meant to support a scholarship named after a Jew. The minister Giuseppe Bottai send a confidential circular¹² to the rectors of all the Italian universities. He ordered to accept no more any such donation from a Jew and to suspend the already existing institutions. He reserved the right to take appropriate measures on a case-by-case basis.

There was no public reaction by the Institute of Physics or the Faculty of Sciences as for the suspension of the “Aldo Pontremoli” scholarship. It is possible that it was meant to be just a temporary fact since even the Italian Jewish community was not immediately and completely aware of the consequences of the racial laws. We must how-

⁷ For more details on the Pontremoli scholarship see (Gariboldi 2019).

⁸ Rome, Archivio Centrale dello Stato, MPI DGIS Div. IV, 122, “Milano R. Università. Borsa di studio Pontremoli Aldo”: donation act.

⁹ Royal decree n. 1201, August 14th, 1931, published on Gazzetta Ufficiale n. 287, October 1st, 1931.

¹⁰ ASUSM: s. 1.4.4., a.u. 2: Minutes of the meetings of the Board of directors, July 12th, 1932.

¹¹ ASUSM: s. 1.4.4., a.u. 3: Minutes of the meetings of the Faculty of Sciences Council, February 3rd, 1936.

¹² ASUSM: s. 7, a.u. 439: “Difesa della razza”: Ministry of National Education, confidential circular, November 12th, 1938.

ever highlight the fact that no other action was moved against Pontremoli's memory: the Institute of Physics continued to be named after him, and neither the plaque nor the bust were damaged or needed to be hidden.

The suspension was but not a temporary fact. On October 24th 1939, Mrs. Luzzatti wrote the Minister of National Education a plea asking to restart the award.¹³ She and her other son, Giorgio, had obtained a discrimination decree (that is, the racial laws were not applied to them) as Luigi Luzzatti's daughter resp. grandson. For the same reason, she thought, Aldo too would have been obtained a discrimination decree, not to mention his merits as a fighter during the First World War and his participation to the heroic polar expedition. In such a case, a scholarship named after him should have not been suspended. The minister replied to the rector that he could not take any action on this until Mussolini had made his decision on the institutions named after a Jew.¹⁴

Eventually neither Bottai nor Mussolini take any decision at all, as it is testified by a dozen of minutes concerning the postponement of the decision.¹⁵ The stricter alliance with Germany during these years, in particular during the Italian Social Republic, might have contributed to the lack of a decision while the living conditions of the Italian Jews continued to worsen. Pontremoli's family succeeded to flee to Switzerland on September 12th, 1943 and escaped the tragic fate of many Italian Jews deported to extermination camps.

After the end of the Second World War, the "Aldo Pontremoli" scholarship was not restored. The rapid depreciation of the Italian lira, from 1943 onwards, had transformed the donated government bonds into wastepaper.

In 2018, on occasion of the ninetieth anniversary of Pontremoli's disappearance, the rector Gianluca Vago announced the decision to name a degree prize again after Pontremoli. From 2019 on, the prize will be awarded to the best thesis of students of the Master's degree Course in Physics at the University of Milan. This prize will continue to honour Pontremoli's memory in the institution he founded in 1924.

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¹³ ACS: MPI DGIS Div. IV, 122, "Milano R. Università. Borsa di studio Pontremoli Aldo", letter from Lucia Luzzatti to the Minister of National Education, October 24th, 1939.

¹⁴ ACS: MPI DGIS Div. IV, 122, "Milano R. Università. Borsa di studio Pontremoli Aldo", letter from the Minister of National Education to Alberto Pepere, April 11th, 1940.

¹⁵ ACS: MPI DGIS Div. IV, 122, "Milano R. Università. Borsa di studio Pontremoli Aldo". Minutes on date August 28th (1940?), February 3rd, 1941, April 4th, 1941, May 6th, 1941, October 4th, 1941, November 8th 1941, February 4th 1942, March 1943. Minutes of postponements to March 30th, 1943, May 31st, (1943?), August 30th, 1943, June 30th, 1944.

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