1 - Armillary sphere (H. Drechsler, Palermo, ca. 1830), for didactic use.

2 – Becquerel's Phosphoroscope (J. Duboscq, Paris, ca. 1865), bought by Pietro Blaserna for experimental research on phosphorescence.

3 – Refractometer (R. Caruso, Palermo, 1843), used to demonstrate the law of the light refraction and the critical angle.

4 – Hipp's Cronoscope (M. Hipp, Neuchâtel, ca. 1865), used for measuring short time intervals with the precision of a hundredth of a second.

5 – Melloni's optical bench (Ruhmkorff laboratories, Paris), used for studying the radiant heat.

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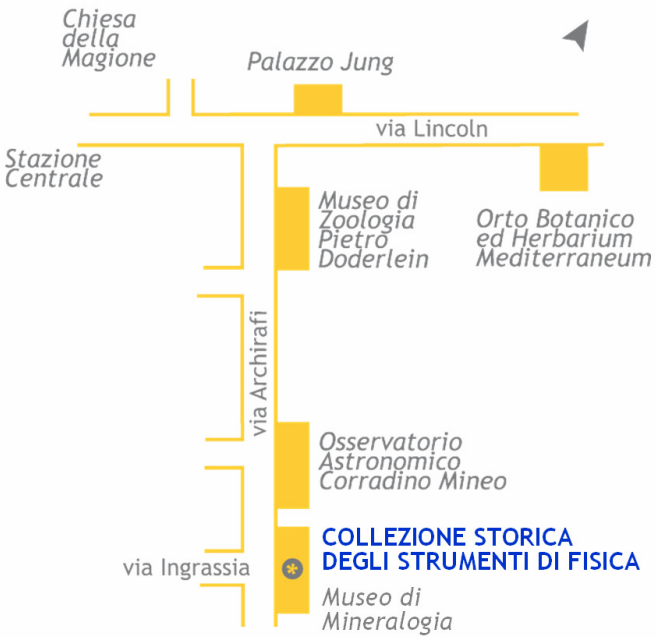

Historical collection of the physics instruments

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MUSEIUNIPA
Sistema Museale dell'Università degli Studi di Palermo

A precious collection

The Historical Collection of the Physics Instruments of the University of Palermo, displayed at the Department of Physics and Chemistry, contains a rich variety of antique instruments and apparatus. The oldest ones date back to 1811, after Domenico Scinà got the chair of Experimental Physics at the old "Gabinetto di Fisica" of the "Reale Università di Palermo". The collection consists of more than 500 pieces, many of which have constituted part of the apparatus used for scientific research. Although the first instruments were only employed for didactic demonstrations, the collection faithfully reflects the main topics of the scientific research carried out in Palermo since the second half of the 19th century onward. The collection mainly contains mechanical, acoustic, calorimetric, optical and electromagnetic instruments made by manufacturers in France, Germany, England, as well as in Italy.

First mid-nineteenth century

Almost 50 instruments have been manufactured the first half of the 19th century, most of them in the local physics laboratory. Among them, the double-cone and the cylinder with a lead ballast that climb up an inclined plane; the brass armillary sphere, attributed to Henry Drechsler, a pupil of the famous Londoner manufacturer Jesse Ramsden; and a rare refractometer realized by Rosario Caruso in 1843.

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After unification of Italy

The collection suffered a gradual deterioration over the last years of the Borbonic dynasty, where several time-worn and obsolete devices were still being used instead of being replaced by modern ones. Only in 1863, the young Pietro Blaserna manages to turn the critical situation around by purchasing a large number of new instruments from the main French, English and German manufacturers. The spectroscope with four prisms made by Duboscq, and Melloni's optical bench built at the Ruhmkorff laboratories in Paris are two notable examples of the devices added to the collection in those years.

First mid-twenty century

Arguably, one of the most prominent instruments in the collection is the ionization chamber used by Emilio Segrè and Carlo Perrier for the studies that led to the discovery of the element technetium.

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Although officials in the University of Palermo wanted them to name their discovery "panormium" in honour of the city of Palermo, the element was finally named after the Greek word τεχνητός, meaning "artificial", as it was the first element to be artificially produced. Emilio Segrè was later awarded with the Nobel Prize in Physics in 1959 for the discovery of the antiproton.

The Historical Collection of the Physics Instruments is a peculiar and precious testimony of the history of Palermo. As such, it deserves to be conserved and valorized constantly.