## An Astronomical Library at Large

Emilia Olostro Cirella, Paolo Paura, Mauro Gargano, & Maria Teresa Fulco INAF-Osservatorio Astronomico di Capodimonte, Napoli, Italia biblioteca@na.astro.it

**Abstract.** The library of the Astronomical Observatory of Capodimonte (OAC) is for researchers and students but is also used by historians of science and members of public who are interested in astronomy, astrophysics, and epistemology. We present the main activities of the OAC library with emphasis on its new role in identifying and promoting the significant accomplishments of Italy's scientists.

#### 1. The History of the Library

The history of the Capodimonte Astronomical Observatory originated in 1735, when the Bourbon king of Naples, Charles III, established the Chair of Astronomy and Navigation at the Royal University of Naples. However, not until 1812, did the French king of Naples, Joachim Murat, agree to finance the construction of the Observatory, which was finally inaugurated in 1819 by another Bourbon king, Ferdinand I, son of Charles.

Placed on the Miradois hill, near the Royal Palace of Capodimonte, this unique Observatory was built.

The royal astronomer Federico Zuccari, director of the Astronomical Observatory of St. Gaudioso, the very first Neapolitan Observatory, planned "...a beautiful monument of architecture and a temple worthy of Urania..." in the neoclassic style, very fashionable during the ten-year French period in Naples.

Since the very beginning, the *specola* was equipped with top-quality astronomical instruments such as the meridian circle of Reichenbach–Utzschneider and the equatorial refracting telescope of Reichenbach–Utzschneider and Fraunhofer.

The first book collection originated during the foundation of the Observatory; and the creation of the library was promoted by Zuccari already in 1812. In a letter to the Minister of the Interior, Lord Zurlo, requested an Observatory library with the most important astronomical books, with the justification that "... the great Royal Library..." was "far away from the place where the new Observatory will have to be elevated" (Archivio di Stato, 1812). King Joachim gave his consent and Zuccari provided the Observatory with its first set of books. He was aided by European experts, including the famous astronomer Titius Bode (Olostro Cirella, 1995).

Today the library collects a considerable number of books. The ancient section, noteworthy for its historical and scientific value as well as a modern literature section. The latter is further subdivided into monographs and serials,

that offer a broad range of information for all persons interested in the science of the sky.

## 2. The Library Today

The ancient section, enriched from prestigious donations, consists of: 1 incunabulum dated 1488, the De sphaera mundi / Johannes de Sacrobosco; 37 volumes from the sixteenth century, among which is the first (1543) edition of the De revolutionibus orbium coelestium / Nicolaus Copernicus; 68 volumes from the seventeenth century; 385 volumes from the eighteenth century, among which is the Atlas novus coelestium / Johann Gabriel Doppelmayr; and 2294 volumes from the nineteenth century. These books were catalogued in the early seventies.

A computerised new catalogue, prepared in accordance with the ISBD(A) (International Standard Bibliographic Description for Monographic Publications) rules, will be soon available.

The modern section, which began in 1900, is comprised of more than 8000 books, whose editions range from the beginning of 1900 to date. There are twelve classifications and each one is divided according to a subject. The most important and largest classifications are 'Astrophysics' and 'Related Sciences.' The last few years, however, have seen an increasing number of acquisitions in the areas of 'History of Science' and 'Popular Works' and we attribute this growth to the resurgence in outreach activities now promoted by the OAC.

Following the ISBD(M) rules, the modern section has been recatalogued with CDS/ISIS (Computerized Documentation System / Integrated Set for Information System) software. At present, the on-line search for monographs is partially available at the library's Web page and in METAOPAC CUBAI (Catalogo Unico delle Biblioteche Astronomiche Italiane- Unified Catalogue of the Italian Astronomical Library) form. The latter is a unified catalogue of the Italian astronomical libraries consisting of a distributed system without a central archive (Abrami et al., 1995). The CUBAI project was conceived in 1993, with the cooperation of the Italian Astronomical Observatories in order to create a national bibliographical search engine for astronomy (Ferrucci & Balestra, 1994).

More than 110 periodicals are subscribed to by OAC and most of them are journals of astronomical or astrophysical content, with a minority categorized as 'popular genre.' The list is available in the library's web page. In addition, a computerised catalogue has been completed. The OAC journal catalogue is available in the ACNP (Archivio Collettivo Nazionale Periodici - Collective National Archive of Periodicals).

The library is also enriched with approximately 1000 journals, many of national and international acclaim. Some of them are especially valuable because they date back to the second half of the eighteenth century.

#### 3. Other Facilities and Technical Projects

To support the scientific research and the needs of the public, the library offers the following services:

Document delivery (DD); Interlibrary loan (ILL); Bibliographic service. The librarians, in collaboration with the OAC Technical Department, have just planned a different arrangement of the entire bibliographic collection as a consequence of the new and more functional refurbishing of the library. Also a recovery of some of the ancient books in poor condition will be completed by the end of 2002.

#### 4. The OAC Librarians and Public Outreach

The library provides an important role in disseminating information pertaining to the educational and historical flavor of the Observatory. The librarians collaborate with the POE (Public Outreach and Education Department) offer visitors an opportunity to rediscover the Observatory's history by exposing them to the following educational activities:

- Publication of papers on OAC's history by revisiting the scientists' work and their relationship to the national and international discoveries.
- Guided tours for schools: the librarians are involved in guiding students on educational and historical tours at the Institute. This is a key-moment and provides the opportunity to talk about the history of astronomy, the Observatory and its part in the history of Naples. For this purpose, librarians will make use, during their lectures, of the most meaningful images contained in the archive (see below). After this oral introduction, the visit continues to the Museum. This aspect of the visit is climaxes the historical-scientific content of the tour.
- Guided visits for the wider public: the librarians are also involved in some of the public cultural events that are locally or nationally promoted.
- Collaboration with specialised reviews, newspapers, and television press aiming at bringing out the historical, book and instrument heritage of the OAC.
- Realisation of a photographic archive of the *antiportae* and frontispieces of the ancient book collection of the OAC library. These images, of a very high artistic and historical value, are a useful tool for the valorisation of the book.
- The librarians have also collaborated in providing a video tape about the Capodimonte Observatory.

# Acknowledgments

The authors wish to thank dr. Annalina Auricchio, OAC web master, for her help in the graphical realisation of the poster exhibited during the LISA IV Congress.

## References

- Archivio di Stato di Napoli, 1812, Ministero dell'Interno, I inv., 905/1, 1
- Abrami, L. et al., 1995, The Unified Catalogue of Astronomical Italian Libraries (CUBAI) Project, Vistas in Astronomy, 39, 265
- Ferrucci, M. & Balestra, A., 1994, The CUBAI project: new browsing system for data and networks, an example, in New tools for network information retrieval, Porceddu, I. & Corda, S. (eds.), Cagliari: Osservatorio Astronomico
- Olostro Cirella, E., 1995, Il fondo antico della biblioteca dell'Osservatorio Astronomico di Capodimonte, Almanacco OAC, 153
- Piazzi, G., 1821, Ragguaglio del Reale Osservatorio di Napoli eretto sulla collina di Capodimonte, Napoli: Tipografia Francese