

# Giovanni Virginio Schiaparelli & the Arcetri Observatory



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Giovan Battista Donati  
(1826-1873)

The Arcetri Observatory was inaugurated on the  
27<sup>th</sup> October 1872

It was built to house the **Amici I telescope**  
28 cm f/19 equatorial mount  
The largest equatorial in Italy  
*but*  
no divided circles, no clockwork



Donati had hopes to buy a **Great Meridian Circle** ...

...but he died before the Observatory  
Instrumentation was completed  
on 20 September 1873





Ubaldino Peruzzi  
(1822-1891)

## The offer to Schiaparelli

The board of directors of the Istituto di Studi Superiori of Florence search for a professor of **great renown** for the Chair of Astronomy



Luigi Menabrea  
(1809-1896)

Other names considered: Secchi, Tacchini ... but too “specialised” in Physical Astronomy

Informal contacts with Celestino Schiaparelli, brother of Giovanni

*“You know how miserable is Milan Observatory: if I had to consider science only, I wouldn’t hesitate a moment to go to Florence, where Donati erected the most beautiful and proper of the Italian observatories [...] But you know also what interests tie myself to Lombardy”*

Giovanni to Celestino, 3/10/1873.

## The offer:

Annual salary offered: 9000 lire

Probable salary in Brera: 7000 lire

Salary of Donati: 6900 lire



**Schiaparelli accepts:** *“I trust the Board of Directors that, after having laid the foundations of an Observatory worthy of modern Astronomy, they will not refuse those further resources that are necessary for making it useful to science.”*

Schiaparelli to Peruzzi, 19/10/1873

*“The circles of the Great Amici equatorial are not divided yet [...] and it is urgent to take decisions on the Meridian Circle”*

Schiaparelli to Menabrea, 29/10/1873

**Due to start on May 1<sup>st</sup> 1874.**

*“Signor Schiaparelli [...] has been appointed Director of the Florence Observatory [...]. [The Observatory] is in every way superior to that of Milan, and we may look for considerable results from an astronomer who has already done much with smaller opportunities”* Nature, 11/12/1873



The *gran rifiuto* : Schiaparelli cannot come because of family problems, he asks for his word back  
(Schiaparelli to Peruzzi, 7/1/1874)

The “*technical and scientific high directorship*”: Schiaparelli is asked to give advice on scientific research in Arcetri, on the solution to technical problems or need, coming to Florence when needed. The professor's salary is saved to meet the needs of the Observatory.

But the assistant astronomer suddenly died

Schiaparelli suggests the name of W. Tempel as assistant, a talented observer and discoverer of comets and asteroids, “the kind of discoveries that impress more the public”  
(Schiaparelli to Peruzzi, 10/8/1874)



Domenico Cipolletti  
(1834-1874)

R. ISTITUTO DI STUDI SUPERIORI PRATICI E DI PERFEZIONAMENTO

IN FIRENZE.

Written at the end of January 1875,  
after a visit to Arcetri

SEZIONE DI SCIENZE FISICHE E NATURALI.

# OSSERVATORIO ASTRONOMICO D' ARCETRI

Report on the status of the instrumentation and of the  
building, which is already deteriorating...

RELAZIONE E PROPOSTE

Suggestions on necessary repairs to the building, on the  
purchase of the Great Meridian Circle, on a contract to  
divide the circles of Amici I

Prof. Comm. GIOVANNI SCHIAPARELLI

DIRETTORE DEL R. OSSERVATORIO DI BRERA IN MILANO



Fig.1. (1<sup>st</sup> type: *Sirius, Vega, Altair, Regulus, etc.*)

## Schiaparelli & Astrophysics

The first part of the *Relazione* is a reply to a proposal to convert the Arcetri Observatory into a “*laboratory of celestial Physics, Chemistry and Photography*” (by Nostradamus, L'Epoca, 25 /11/1874)

Schiaparelli says that the Observatory is built for Classical Astronomy and precise position measurements (as Greenwich, Pulkowa and Washington).

Schiaparelli's ideas supported by a report of Donati made in 1873, and by a letter from O. Struve: “I consider absurd the opinion of those who believe that the principal problem and the higher purpose of our science is the sole and dominant continuation of astro-physical observations, while they assign a secondary importance to Precision Astronomy”.

A α B C

D

E β

F

G

H

## Schiaparelli's fading interest in Arcetri

The suggestion of Schiaparelli went unattended

No repair work could be done on the Observatory because of legal problems between the builders and the Government.

In 1877 Schiaparelli and Tempel were part of a Committee to discuss what repairs were needed

In 1878 the “attentions” of the institute shifted to Giovanni Celoria.



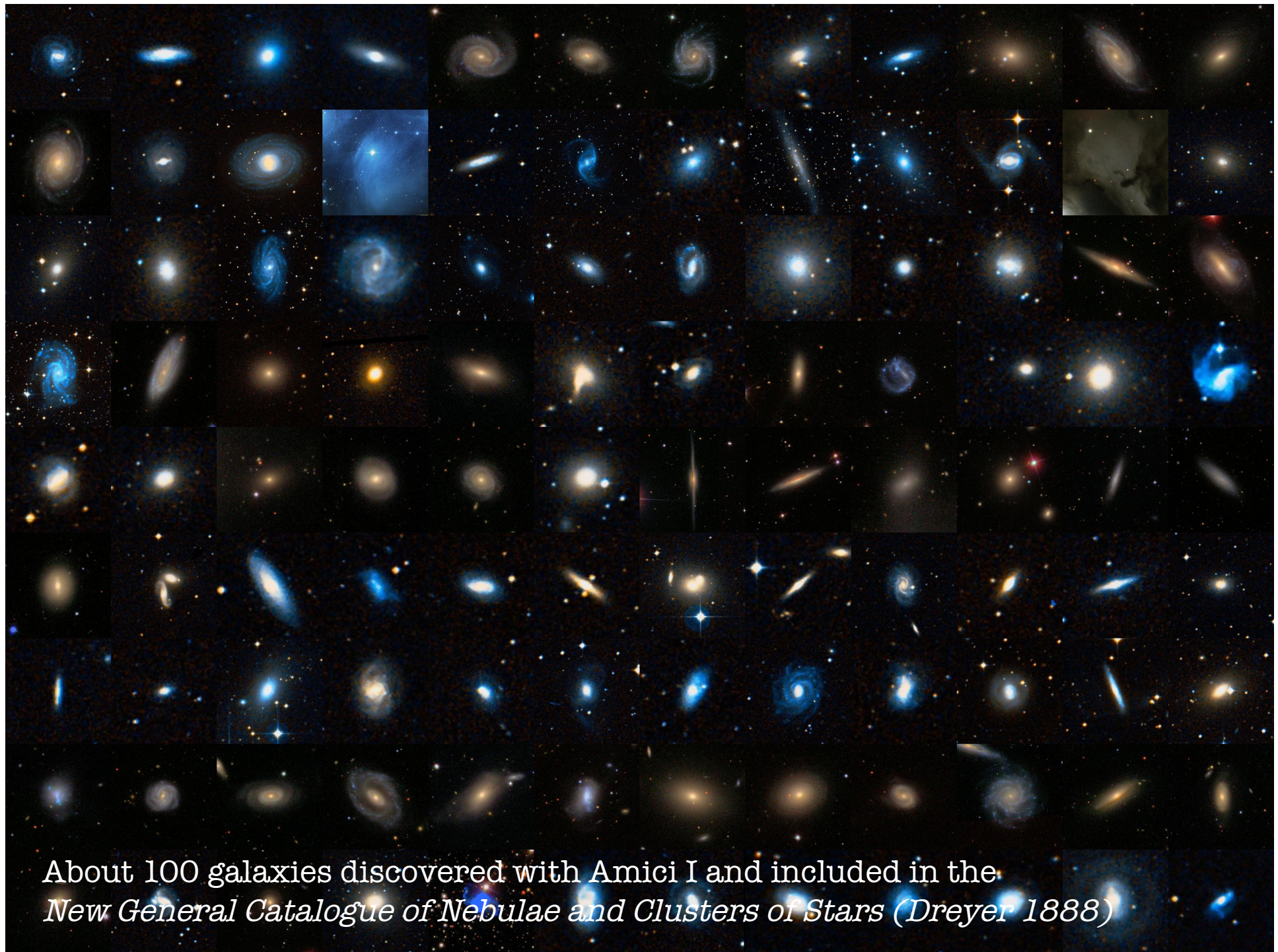
# Schiaparelli's Legacy in Arcetri I

Wilhelm Tempel  
(1821-1889)



Orion nebula, drawing by Tempel





About 100 galaxies discovered with Amici I and included in the  
*New General Catalogue of Nebulae and Clusters of Stars (Dreyer 1888)*



## Schiaparelli's Legacy in Arcetri II



G. B. Amici's personal telescope  
(Amici II)

Ø 24 cm, foc. length 3.2 m

made in 1844

bought in 1875 for the Observatory

Purchase advised by Schiaparelli  
*"... exquisite and rare product of  
the Italian Optical Craft..."*

*G. V. Schiaparelli to U. Peruzzi, 1/5/1875*

Now at the **Museo Galileo** in Florence