

WOMEN IN ASTRONOMY - ITALY

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1. Introduction

Let me start with a short historical excursion, taking the Bologna University as an example. The Bologna University was founded in 1088, but only at the beginning of 1700, when a deep transformation in the tradition and female behaviour model occurred, women started to approach the academic life, mostly in humanities. There were also examples of scientist women, often without a real academic title working side by side with men (generally fathers or husbands).

During the 19th century the female presence in the Italian universities slowly increased, becoming a reality at the beginning of the 20th century. In the time interval from 1884 to 1900, 224 degrees were assigned to women in Italy (less than 10% of the total): 68.9% in Literature and Philosophy, 7.8% in Mathematics, 11.7% in Natural Science, 9.3% in Medicine, and 2.3% in Law. Women were mostly involved in fields related to educational activities, however six out of 224 got a chair at the Universities, five of which in scientific fields.

The increase of female presence continued, and after 1970 the opportunities for men and women to achieve a degree at the University became almost the same. In 1961 only 5.1% of women were students at the University while for men the fraction was 12.3%; in 1981 the two percentages were almost the same (24% for women and 27% for men), indicating both a big increase of people reaching the highest level of culture, and a certain degree of parity between male and female students.

The distribution of percentage of women among the various faculties is very different: the technical sciences as engineering are still strongly underpopulated, while humanities are overpopulated, but the trend is clearly in

the direction of the parity. In the science Faculty, the percentage of female students is about 47%, where it has been stable for about 10 years.

2. Women in Research

The presence of women faculty members in the Italian universities is now slightly less than 30%, this figure was reached in 1976 and has been stable at this level since then.

Women are however differently distributed in the different career classes. In the Italian universities there are three career classes: I - Full Professor, II - Associate Professor, III - Researcher, Assistant and Instructor. In Table 1, the percentage of female university members in different career classes are displayed for the Bologna University.

TABLE 1. Distribution of Women in Universities

Year	I	II	III
1966	2.7	7.0	19.6
1976	5.0	33.8	34.3
1986	6.3	26.3	42.6
1992	8.5	28.7	46.3

The high percentage of women in class III after 1986 is not due to the employment of a high number of female scientists at that epoch, but rather to the fact that women tend to remain in the low level in the academic competition for university chairs. In fact the total number of class III employees in 1992 (720) was less than the total number in 1986 (915).

We find the same situation in the National Research Council (CNR), and in the Astronomical Observatories (AO), two independent research bodies. In 1993 the female presence was about 30% in the CNR and about 25% in the AO, the distribution in the three classes of career (same as in the University) is shown in Table 2.

Further considerations can be made. Even if the percentage of women in the I class career is at the level of 8 - 10%, the female directors are 3.3% at the Bologna University, no more than 3% in CNR and none in AO.

Family also is an interesting matter: the percentage of singles among female professors is twice as large as the whole female population, and the majority of the female scientists have a colleague as a partner.

TABLE 2. Distribution of Women in Research Institutions

	I	II	III
CNR all	14.7	24.9	38
CNR (Math,Phys,Astr)	9.0	18.9	33
Astronomical Observ.	<8	19	25

The data on the Bologna University were given by Paola Monari, Dep. Scienze Statistiche, Università di Bologna, and those on AO are given by Carla Maceroni, Osservatorio Astronomico Monte Porzio, Roma