

## Chapter 5

# Human resources

In the next decade INAF will be involved in most of the major worldwide astronomical projects. Unavoidably, the future success of the INAF activity in these ambitious programs will highly depend on the excellence, motivation and numerical consistency of its personnel. It is obviously essential to make sure that a career in INAF can be both accessible and attractive for brilliant researchers, offering at the same time recruitment opportunities and possibilities for career advancements. With this in mind, an illuminating perspective is obtained by retrospectively looking at the trends of the research personnel opportunities for new recruitments and career advancements in the last 10 years. Applying the same rates of the last 10 years and considering retirements, Fig. 5.1 shows the numerical evolution of INAF permanent staff involved in research and technology, in total and for the three different career levels.

The current situation is characterized by permanent positions allocated almost exclusively at the lowest entry level, plus a high number of non-staff members. In this respect, INAF personnel is by far in the worse situation in Italy, if compared to all other Astronomy and Physics research organizations and academic departments, as shown in Fig. 5.2.

Even more alarming is the predicted evolution of the situation. The scarce recruitment level of the last ten years, if maintained in the future, will lead to a drastic reduction of the overall number of research staff members, as well as to the almost total disappearance of the already modest career developments.

Nowadays, the newly recruited permanent staff researchers are at least 35 year old, or older. This means that a brilliant young graduate person must afford more than 10 years of precarious work before becoming a staff member. This might seem acceptable in some other countries, where short term jobs in research organizations have a better salary and the overall labor market is much more flexible. In Italy, however, such a perspective is not attractive at all for the best young students, who in addition would have the depressing prospect of remaining forever at the lowest career level (Fig. 5.1). As a logical consequence, if INAF will not offer realistic possibilities for a sufficient number of new job positions, as well as opportunities for career development, the potentially best researchers will migrate towards better job alternatives, or other countries. It is mandatory to reverse these negative trends or Italy will run the serious risk of investing in the forthcoming world-class astronomical technological projects, without having the capability to benefit of such facilities in terms of scientific return. In order to maintain the top level position Italy has achieved and maintained for many years in Astronomy, a prompt change of direction is imperative. INAF priority is to invert the trend of the last years, implementing a dedicated plan for the valorization of human resources employed in research and technology, for the whole career development of brilliant people. In order to achieve these goals, INAF needs the Italian Government and the Italian Ministry of University and Research (MIUR) to support this strategy, ensuring an adequate funding level and lifting turn-over budgets and number restrictions.

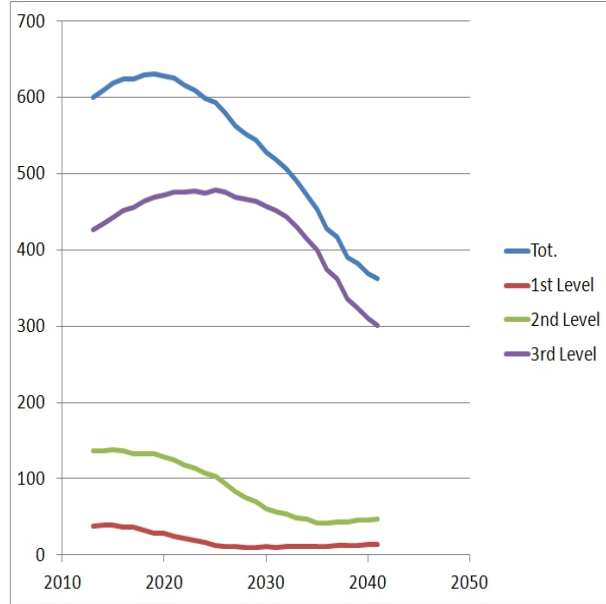


Figure 5.1: Numerical evolution of the research and technology INAF personnel, considering retirements and applying the average rate of recruitments and career developments of the last 10 years (2004-2013). The analysis for the three individual career levels (1st level is the highest) is included.

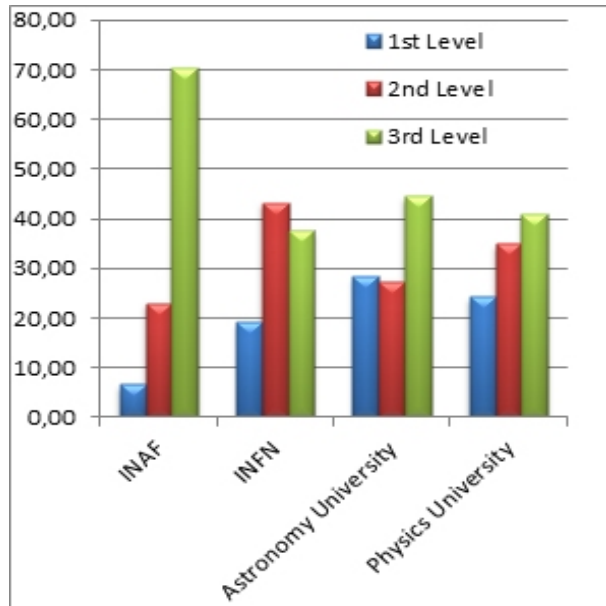


Figure 5.2: Personnel distribution from the highest (1st) to the lowest (3rd) level in Italian Astronomy and Physics main research organizations and University departments.