

Research at the Observatory of Palermo is carried out in collaboration with scientists from the Physical and Astronomical Sciences Department of the Palermo University, as well as international institutions and research centres, as part of a program essentially dealing with:

- physics of the Sun and sun-like stars atmosphere;
- star and planetary systems formation and evolution;
- star clusters and populations in the galaxy;
- supernovae remnants and their interactions with the surrounding environment;
- development of instruments for space-based astronomy
- Innovative computational techniques for the analysis of data and theoretical calculation.

A recent addition at INAF-OAPa is research in experimental Astrobiology, a field which by benefiting from the scientific and technological know-how gained from other long-time running research sectors, studies the effects of stellar X-rays on life-originating compounds.

In order to develop innovative equipment and techniques for X-ray astronomy, advance the research in the field of high performance calculation and study astronomical data, it became necessary to build specialized laboratories, set apart from the Observatory in via Ingrassia, such as the X-ray Astronomy Calibration and Testing (XACT) Facility, SCAN (Sistema di Calcolo per l'Astrofisica Numerica: Computing System for Numerical Astrophysics), and the astrobiology laboratory.



HIGH EDUCATION AND TRAINING

The Observatory promotes training for European researchers in the field of astrophysics through activities in support of vocational courses, graduation theses, PhDs and post-PhD training.

The internal research personnel cooperates with University professors to develop teaching programs within the graduate and PhD courses in physics, IT and engineering.

INAF-OAPa offers to young people about to graduate, and young PhDs, the possibility to carry out research and pursue a traineeship for the purpose of gaining university credits. Post-graduate and post-PhD advanced research is directly financed by the Observatory by means of scholarships and non-tenure-track fellowships that usually allow students to spend short spells (weeks or months) at European and North American Universities or Colleges.

Since 2000, the European Union has also channelled direct funds for post-doctoral research activities to scientists coming from member or extra-European partner countries. In particular, funds from the Sixth European Framework Program, the CONSTELLATION, PHOENIX and ISHERPA projects, allow European researchers to exchange their knowledge.

These projects make INAF-OAPa an international, stimulating and scientifically productive working environment.

RESEARCH



Logo of the EU-funded
CONSTELLATION project



Logo of the EU-funded
PHOENIX project



Logo of the EU-funded
ISHERPA project

