



JOB ANNOUNCEMENT

The Istituto Nazionale di Astrofisica – Osservatorio Astronomico di Capodimonte (INAF- OACN) is offering a post-doctoral position in **“Sviluppo di software per fotometria PSF di sorgenti puntiformi ed analisi di variabilità stellare in dati Rubin-LSST”**, coordinated by Dr. Massimo Dall’Ora, within the project “Partecipazione LSST – Large Synoptic Survey Telescope (ref. Adriano Fontana)”, and local PI Prof. Massimo Brescia

RESEARCH PROJECT

The postdoctoral fellow will focus on the photometric analysis and study of the stellar populations, including the variability, of the Galactic Bulge, as part of the Italian in-kind contribution to Rubin-LSST. The applicant will be active part of the process of providing high-quality photometric catalogues to the community, based on high-precision PSF photometry of the Rubin-LSST images. Robust programming skills in Python-based environments are preferable, and a robust knowledge of the resolved stellar populations and of the stellar variability are highly appreciated.

The applicant will primarily collaborate with Massimo Dall’Ora at INAF – Osservatorio Astronomico di Capodimonte (Napoli, Italy), working closely with other colleagues who are experts in resolved stellar populations, stellar pulsation and structure of the Galaxy, working in other Italian and abroad institutes.

ELIGIBILITY

The appointment is expected to begin by July 15th, 2024, and will be for 12 months, with a possible renewal of 12 months. The yearly gross salary is 28,373.85 Euros, corresponding to a net salary of around 25,000 Euros.

The deadline for sending applications is July 10th, 2024 – 11.59 p.m. (Italian time).

REQUIREMENTS

- PhD in Astronomy or Physics or equivalent qualification awarded by public or private Universities, Institutions, Research Organizations or Centers or other qualified research bodies, both in Italy and abroad, in the topics relevant to the scientific and technological area and the research object of this call.
Or alternatively:
- Master Degree in Astronomy or Physics or equivalent qualification, together with 3 years of documented experience, awarded by public or private Universities, Institutions, Research



Organizations or Centers or other qualified research bodies, both in Italy and abroad, in the topics relevant to the scientific and technological area and the research object of this call.

With the sole scope of admission to this selection procedure, the equivalence of educational qualifications obtained abroad will be verified by the “Selection Committee” as of Art. 8 in the Call, on the basis of documentation forwarded by the candidate as foreseen by Art. 3 of the “Call”, provided that, in case the candidate is the winner of the aforesaid procedure, the Administration will acquire the results of the verification performed by the “Selection Committee” and will forward them together with the documentation listed in Article 3, paragraph 2, letter a) or b) of the Decree n. 189 of the President of the Republic of 30 July 2009, plus the application of the candidate, to the Ministry of University and Research with the scope to acquire the opinion foreseen in Article 4, paragraph 2 of the aforementioned Decree.

PREFERENTIAL QUALIFICATIONS

We are particularly interested in candidates with expertise in one or more of the following:

- Robust knowledge of stellar evolution and variability;
- Robust experience on handling of catalogues of resolved stellar populations;
- Familiarity with python programming;
- Knowledge of the DAOPHOT IV (Daophot/Allstar/Allframe) suite;
- Familiarity with the most popular tools for data handling and visualization (Topcat, Aladin, etc.)

APPLICATION PROCEDURE

Applications must be sent via certified e-mail to inafoanapoli@pcert.postecert.it; or, alternatively, via email to concorsi@oacn.inaf.it

In the email subject the applicant should make explicit reference to **“Sviluppo di software per fotometria PSF di sorgenti puntiformi ed analisi di variabilità stellare in dati Rubin-LSST”**.

Applications must include the following Annexes dated and signed:

- the Application Form (Annex A);
- the self-certification Form (Annex B);

The applicant also needs to attach:

1. a curriculum vitae (dated and signed);
2. a complete list of relevant publications, dated and signed, which should contain all details: title, journals, years of publication, lists of authors, and web addresses on which they can be viewed;
3. a list of all submitted documents.
4. a copy of a valid identification document;
5. any other work or publication the applicant deems useful.



6. Two reference letters. Contacts should address them by the deadline for application to: inafoanapoli@pcert.postecert.it, or to concorsi@oacn.inaf.it, reporting in the object of the mail: **“Sviluppo di software per fotometria PSF di sorgenti puntiformi ed analisi di variabilità stellare in dati Rubin-LSST”** and the name of the candidate they are referred to.

Incomplete or unsigned applications will be rejected.

Naples, 24 May 2024

Il Direttore
Dott. Pietro Schipani