

Bologna, 29th September 2021

Job Announcement

Two-year postdoctoral fellowship at INAF- OAS (Osservatorio di Astrofisica e Scienza dello Spazio di Bologna) on: “***Sub-parsec resolution cosmological simulations of globular clusters***”

Research Project

In a project aimed at performing high-resolution cosmological simulations of proto-galactic systems at high redshift ($z > 6$) to investigate the physical conditions where the first Globular Clusters originated, the successful candidate will take care of code development, of the analysis of extant simulations and comparison with available observations, which concern primarily the properties of extremely compact systems detected thanks to gravitational lensing and hosting young stellar clusters.

Eligibility

The candidate must have either:

-a **PhD**

or

-a **Master degree** awarded by an Italian or foreign University **that allows access to the PhD followed by a demonstrated experience of at least three years** in a technological or scientific field.

A good knowledge of Fortran programming language in a parallel environment (OpenMP/ MPI) is required.

Knowledge of issues related to the execution and analysis of cosmological simulations will be a preferential title. Finally, a good knowledge of English is also required.

Appointment description

The appointment is expected to begin in early 2022, and will be for two years. The net monthly salary is around 2,060 Euros.

Contact person

Prospective candidates are encouraged to contact Dr. Francesco Calura (francesco.calura@inaf.it) for additional information.

(see the next page for information on the application procedure)

Deadline and Application procedure

The deadline for sending applications is November 2, 2021. By the same date, the candidate should arrange for up to **three reference letters** to be e-mailed separately to francesco.calura@inaf.it

Applications must be sent via e-mail to: inafoasbo@postecert.it. In the email subject the applicant should make explicit reference to: “**Post-doc GC_Cosmo**”

The application must include the following documents:

1. **Annex A - Application form**
2. **Annex B - Substitutive declaration of certification ;**
3. **Annex C - Date for the remote interview**
4. **Annex D - Request to evaluate the title from abroad**
5. “**Curriculum vitae**”, **signed and dated** by the candidate, which also indicates any scholarships and research grants previously or in progress;
6. **Copy of a valid identity document;**
7. **List of publications**
8. **Any other qualification**, work experience, research activity at public or private institutions and publications that the candidate deems appropriate to attach;
9. **List of all documents submitted.**

Each of the above documents must be signed and dated. Note that the application will be rejected if incomplete and/or unsigned.