

JOB ANNOUNCEMENT DD 103/2022

The Istituto Nazionale di Astrofisica – Osservatorio Astrofisico di Arcetri (INAF-OAA) is offering a two-year post doctoral position in *“Il ruolo del campo magnetico nel processo di formazione stellare” / (The role of magnetic fields in the star formation process)*

RESEARCH PROJECT

The research activities consist mainly in the acquisition, reduction, and analysis of ALMA, SMA, and VLA interferometric data of polarized dust continuum and line emission at millimeter and sub-millimeter wavelengths in star-forming regions. The main aims of the activity are to interpret the polarization maps in terms of structure and morphology of the magnetic field (both the large-scale and turbulent component), and to analyze the physical properties of the region that may influence the polarized emission, such as variations in opacity, temperature, and polarization efficiency.

ELIGIBILITY

The appointment is expected to begin by June 5 2023 and will be for two years in the first instance, and renewable afterwards, subject to funding availability and performance review. The yearly gross salary is 30,000 Euros.

Prospective candidates are encouraged to contact:

- Dr. Maria Teresa Beltran Sorolla maria.beltran@inaf.it (INAF-OAA).

The deadline for sending applications is **January 31, 2023 – 11.59 p.m. (Italian time)**.

REQUIREMENTS

- PhD in Physics or Astronomy 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 Physics or Astronomy 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 subsequent Art. 7, on the basis of documentation forwarded by the candidate as foreseen by Art. 3 of this “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.

➤ **PREFERENCIAL QUALIFICATIONS:**

- Expertise in the analysis of interferometric data at millimeter and sub-millimeter wavelengths;
- Expertise in the analysis of polarized dust continuum and/or line emission;
- Expertise in the field of galactic star formation;

Application procedure

Applications must be sent via e-mail to: inafoarcetri@pcert.postecert.it. In the email subject the applicant should make explicit reference to: **“Bando MAGMA - Domanda per assegno Post dottorato – DD n. 103/2022”**.

Applications must include the following Annexes **dated and signed**:

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

Two reference letters will be appreciated. Editors/contacts should address them by the deadline for application to: inafoarcetri@pcert.postecert.it, reporting in the object of the mail: “DD n. 103/2022” and the name of the candidate they are referred to.

The applicant also needs to attach:

- 1) a copy of a valid identification document;
- 2) a curriculum vitae (**dated and signed**);
- 3) **if awarded outside Italy**, copy of academic qualifications and also transcripts in case of Master Degree;
- 4) a list of scientific publications;
- 5) any other work or publication the applicant deems useful;
- 6) a list of all submitted documents.

Incomplete or unsigned applications will be rejected.