

## **JOB ANNOUNCEMENT DETERMINA 239/2023**

The Istituto Nazionale di Astrofisica – Osservatorio Astrofisico di Arcetri (INAF-OAA) is offering a two-year post doctoral position in “*Characterization of exoplanet atmospheres at high spectral resolution*”.

### **RESEARCH PROJECT**

The research activity will concern:

The successful candidate will contribute to several research programs led by Dr. Lorenzo Pino and the GAPS collaboration (<https://theglobalarchitectureofplanetarysystems.com/>). The goal of the programs consists in determining the atmospheric properties (composition, clouds, dynamics) of a sample of extrasolar planets, using high spectral resolution observations from the optical to the near-infrared. These observations are part of several surveys led by Dr. Lorenzo Pino and the GAPS collaboration, such as “GAPS 2.0: the origin of planetary systems”. The successful applicant will furthermore join ongoing efforts aimed at developing a new retrieval framework of wide applicability, across wavelength and resolutions.

### **ELIGIBILITY**

The appointment is expected to begin by February 29<sup>th</sup>2024 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 29,000 Euros.

INAF-OAA is an equal opportunity employer committed to diversity.

Prospective candidates are encouraged to contact:

- Dr. Lorenzo PINO [lorenzo.pino@inaf.it](mailto:lorenzo.pino@inaf.it) (INAF-OAA).

The deadline for sending applications is **November 15, 2023 – 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. 7 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.

#### **PREFERENCIAL QUALIFICATIONS:**

- Expertise in modeling of (exo)planetary atmospheres;
- Familiarity with data analysis methods in the field of exoplanet atmospheres;
- Experience with high resolution ( $R > 20,000$ ) spectroscopy;
- Familiarity with statistical methods.

These qualifications are preferred, but not required.

#### **APPLICATION PROCEDURE**

Applications must be sent via e-mail to: [inafoarcetri@pcert.postecert.it](mailto:inafoarcetri@pcert.postecert.it). In the email subject the applicant should make explicit reference to "**Bando PRIN MUR 2022- Domanda per Assegno Progetto ESPLORA. DETERMINA 239/2023**".

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](mailto:inafoarcetri@pcert.postecert.it), reporting in the object of the mail: "DETERMINA n. 239/2023" 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) a research statement covering past research, also in connection with this research project (max 2 pages excl. references)

- 4) **if awarded outside Italy**, copy of academic qualifications and also transcripts in case of Master Degree;
- 5) 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. For publications 5 considered most important, a brief description of the role played in them is required.
- 6) any other work or publication the applicant deems useful;
- 7) a list of all submitted documents.

Incomplete or unsigned applications will be rejected.