



SUMMARY OUTLINE OF THE NOTICE OF COMPETITION

Subject:

Public selection procedure, based on qualifications and possible interview, for the awarding of a post-doc research fellowship, lasting two years, for the needs of the project “**PATH: The path to star and planet formation in the JWST era**”.

Art.1: Description of the research activity to be carried out

The research activity will be carried out in the framework of the PATH (The path to star and planet formation in the JWST era) project. In particular, the selected candidate will study the different mechanisms that lead to disk dispersal in young stellar objects: accretion, ejection, winds (thermal and photo evaporative), planet formation. The post-doctoral researcher is expected to analyse and publish infrared integral-field spectroscopic data acquired with NIRSpec and MIRI/MRS at the James Webb Space Telescope from several GTO and GO programmes, as well as with ERIS at ESO/VLT from the Italian GTO programme. The aim of this programme is to understand how the different dispersal mechanisms work in a large sample of YSOs with different masses (from low- to high-mass) and at different stages of star formation, from the early stage in Class 0 to later stages of Class II YSOs. Funding for travelling within nodes, for conferences and publications are available.

The scientific referent of the research fellowship is Dr. Alessio Caratti o Garatti.

Art.2: Admission requirements

In order to be admitted to the selection procedure governed by this call, the possession of one of the following qualifications is required:

- PhD in Astronomy or Astrophysics or equivalent, issued by a Higher Institute or University (including foreign); ^[1] ~~or~~
- Master degree (or 2nd level Laurea degree, if issued by an Italian University) in Astronomy or Astrophysics or equivalent qualification, issued by a Higher Institute or University (including foreign), together with at least three years of documented experience in scientific or technological activity after graduation. The equivalence will be established by the selection board according to criteria defined for the purposes of the selection procedure.

A good knowledge of the English language is required.

The following skills and competences will be considered preferential requirements:

- Excellent knowledge of star formation and previous works on young stellar objects. Previous work on accretion, ejection, winds in YSOs, or planet formation would be an asset.

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- In depth expertise in reduction and analysis of spectroscopic data, in particular in the IR regime. Previous experience in integral-field spectroscopy would be a further asset.
- Experience with one or more programming languages (e.g., Python, IDL) and data analysis tools (e.g., IRAF, Python, CASA).

Art.3: Submission

 Applications must be submitted in one of the following ways:

- by certified e-mail, including all required documents in PDF inafoanapoli@pcert.postecert.it. Only e-mail PEC from one of the operators indicated in the list of the AgID Digital Italy Agency pursuant to Presidential Decree No. 68 of 11/02/2005 is considered valid; attachments must be in PDF format. Subject must be: “Assegno di Ricerca - PATH: The path to star and planet formation in the JWST era”
- by regular electronic mail (e-mail) to concorsi@oacn.inaf.it; attachments must be in PDF format. Subject must be: “Assegno di Ricerca - PATH: The path to star and planet formation in the JWST era”
- by registered mail with return receipt to the National Institute of Astrophysics - Osservatorio Astronomico di Capodimonte – Via Moiarriello, 16 – 80131 Napoli;
- by authorised express courier to INAF - Osservatorio Astronomico di Capodimonte – Via Moiarriello, 16 – 80131 Napoli.

Applications must be received no later than **December 20 2023 - 23:59** CET (not postmarked). Late applications will not be considered.

 The applicants might also arrange a **maximum of two reference letters**, to be sent directly by the referees to the address: concorsi@oacn.inaf.it by **December 20 2023**, reporting in the subject the indication of the related procedure (PATH post-doc fellowship) and the name of the candidate. Letters received after this deadline will not be considered.

Aware that false declarations against the law are punishable for and that the Administration can proceed to verify the veracity of the declarations made, the candidate must clearly and precisely declare:

- name and surname, date and place of birth, nationality, residence and address for sending correspondence,
- to possess all the requisites described in Art. 2 of this announcement;

Furthermore, the candidate, under his own responsibility, must declare in the application that:

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- they have not received criminal convictions or have criminal proceedings in progress, specifying, if not, which convictions or proceedings exist;
- whether they have benefited or still benefit from other research contracts or fellowships from other public or private institutes and for what duration.

The lack of the declarations mentioned above will result in the exclusion from the selective procedure for incomplete application.

For the purposes of selection, the candidate can self-certify the possession of academic qualifications through Annex 1. In addition, non-EU citizens residing outside Italy, if successful, must produce originals or suitably certified copies of academic qualifications obtained outside Italy.

To participate, the following documents must be presented:

- Complete Application Form, as provided in the Annex A of this announcement;
- Annex B - substitutive declaration of certification - substitutive declaration of deed of notoriety (art. 19 - 46 - 47 of Presidential Decree 28 December 2000, n. 445);
- “Curriculum vitae”, signed and dated by the candidate, which also indicates any scholarships and research grants previously held or in progress;
- Copy of a valid identity document;
- List of publications;
- Any other qualification, work experience, research activity at private or public institutions and publications that the candidate deems appropriate to present;
- List of all documents presented.

Candidates are admitted to the selection with reserve and may, at each stage, be notified of their exclusion from the selection for the following reasons:

- the application was submitted after the deadline;
- lack of demand;
- lack of a copy of a valid identity document;
- lack of the requisites indicated in art. 2.

If the reasons for exclusion are ascertained after the conclusion of the selection procedure, the candidate will lose all rights to participate in the selection; similarly, we will proceed if the production of false declarations is ascertained.

INAF declines all responsibility for loss of the application or documentation when this derives from the fact of the applicant for having provided incorrect contact details or for having failed or delayed notification of any changes.

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Art.4: Duration of the research fellowship

The duration of the fellowship is two years, renewable if necessary subject to the assessment of the needs of the research program, subject to a reasoned request from the Scientific Responsible and, in any case, within the limits provided for in article 22, paragraph 3, of Law 240/2010 and subsequent amendments and subsequent amendments and additions. The financial coverage of the position is currently granted for two years.

Art.5: Location of the research grant

The location of the study and research activity will be the Astronomical Observatory of Capodimonte. The candidate will be able to participate in a transfer abroad.

Art.6: Amount of the research grant

The total amount of the research grant is € 64,000.00 (annual gross salary is € 32,000.00); this amount is to be understood net of the charges to be borne by the Astronomical Observatory of Capodimonte and will be paid in deferred monthly installments. The selected candidate will have to provide at his own expense to take out an accident insurance policy that he will have to show when the report is formalised.

Napoli, November 13, 2023

Il Direttore
Dott.ssa. Marcella Marconi