



One (1) Post Doc position in the project

“SMILE”

Search for Milli-lenses to discriminate between dark matter models

(Call: ERC-2021-STG, GA 101040021)

Funded under HORIZON.1.1 - European Research Council (ERC)



**Funded by
the European Union**

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The Institute of Astrophysics (IA) of the Foundation for research and Technology Hellas (FORTH), in the framework of the project SMILE, (Call: ERC-2021-STG, Proposal number: 101040021) funded under HORIZON-EUROPE.1.1. - European Research Council (ERC) is seeking to recruit one (1) Postdoc.

Title: Develop and Test VLBI Imaging Algorithms for the SMILE Project

Job Description

The candidate will test different existing deconvolution algorithms for VLBI image reconstruction in the framework of the SMILE project, and eventually develop an ad-hoc algorithm that can work efficiently on thousands of VLBI datasets without requiring human intervention. The goal of the project is to produce high-fidelity VLBI images of the ~ 5000 radio-loud sources in the SMILE sample. The latter will constitute the base for the search of gravitational lens systems on milli-arcsecond scales, which is the primary goal of SMILE.

Location: IA - FORTH, Heraklion Crete GREECE



European Research Council
Established by the European Commission

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Start Date: 01.01.2025

Project Duration: 12 months (renewable up to 2 years) upon satisfactory performance and availability of funds.

Monthly salary: 2400 euros (gross)

Required qualifications

Candidates with experience with the CLEAN algorithm, and other algorithms for VLBI imaging based on the maximum likelihood or Bayesian statistics, are highly encouraged to apply.

Candidates must have a PhD degree in Astrophysics, Physics or a related field by the time of the appointment. Candidates will be judged as follows:

- Scientific publications relevant to VLBI studies in scientific journals (40%)
- Experience in VLBI imaging techniques (30%)
- Experience in simulating and manipulating VLBI data (30%)

Application Submission

Interested candidates who meet the aforementioned requirements are kindly asked to submit their applications, no later than **November 1st, 2024, 23:59 local Greece** time to the address (info@ia.forth.gr), with cc to Dr. Carolina Casadio (ccasadio@ia.forth.gr).

Applications received by the deadline will receive full consideration, but review will continue until the positions are filled.

In order to be considered, the application must include:

- Application Form (please download file from the job announcement webpage <https://www.ia.forth.gr/employment-opportunities>);
- CV including publications;
- Scanned copies of academic titles;
- Two (2) recommendation letters to be sent directly to Dr. Carolina Casadio (ccasadio@ia.forth.gr) by the deadline.

Contact

For information and questions regarding the application and selection procedure, candidates are asked to contact the secretariat (info@ia.forth.gr), tel. +30 2810-394200.

For information and questions about the advertised position and the research activity of the group or the institute, please contact Dr. Carolina Casadio (ccasadio@ia.forth.gr).

Evaluation procedure

Applications will be evaluated by a three-member evaluation committee. In case of interview procedure, applicants will be invited to participate in person or teleconference.

In case of titles and qualifications awarded by foreign Higher Education Institutions, the provisions of the Law 55/2023 (article 36) and 4957/2022 (article 304) are implemented.

The results of the selection will be announced on the website of IA-FORTH. Applicants have the right to appeal the selection decision, by addressing their written objection to the IA secretariat within five days since the results announcement on the web. Objections are submitted in one of the following ways: in person, by an authorized person, by post, by courier. They also have the right to access (a) the files of the applicants as well as (b) the table of applicants' scores (ranking of applicants results). All the above information related to the selection procedure will be available at the secretariat of IA-FORTH in line with the Hellenic Data Protection Authority. Access to personal data of co-applicants shall be limited to personal data (and relevant data) and supporting documents which have been the basis of the evaluation of the applicants for the specific post(s). Prior to the announcement of the personal data and/or documents of the co-applicants to the applicant, FORTH will inform the data subjects in an appropriate way.

The selected applicants will be notified personally regarding the success of his/her application and will be requested to submit certified copies of his/her degrees. If the submitted documents do not agree with the original application, the applicant will be dismissed.

GDPR Disclaimer

FORTH is compliant with all legal procedures for the processing of personal data as defined by the Regulation EU/2016/679 on the protection of natural persons with regard to the processing of personal data. FORTH processes the personal data and relevant supporting documents that you have submitted to us. Processing of that data is carried out exclusively for the needs and purposes of this specific call. Such data shall not be transmitted to or communicated to any third party unless required by law.

FORTH retains the above data up to the announcement of the final results of the call, unless further process and reservation is required by law or for purposes of exercise, enforcement, prosecution of certain one's legitimate legal rights' as defined in the Regulation EU/2016/679 and/or in national law. Under the Regulation EU/2016/679 applicants have the rights to be informed about your personal data, access to, rectification and erasure, restrictions of process and objection to as provided by applicable regulation and national laws. We acknowledge also to you, that you have the right to file a complaint to the national Data Protection Authority. For any further information regarding exercise of your personal data protection rights, you may contact the Data Protection Officer at FORTH at dpo@admin.forth.gr.

Applicants have the right to withdraw your application and consent for the processing of your personal data at any time. We inform you that, in this case, FORTH shall destroy such documents and/or supporting documents submitted and shall delete the related personal data.