



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 position.

Title: A VLBI study of a sample of 40 promising milli-lens candidates.

Job Description

Postdoctoral position in radio Very Long Baseline Interferometry (VLBI) data calibration and analysis of a multi-wavelengths data sample of radio-loud sources selected for being potential milli-lens systems. The candidate will analyse already available data and propose for new follow-up VLBI observations those targets whose nature remains uncertain. The main goal of the project is to identify milli-lens candidates over a sample of 40 radio-loud sources selected from a catalog of ~ 14000 objects.

The candidate will also have to explore different and new algorithms for the imaging of radio sources, i.e. CLEAN, RML, etc., with the aim of choosing an algorithm that robustly produces high-fidelity radio VLBI images of a large set of data.

Required qualifications

The successful candidate needs to have a PhD degree in Astrophysics (or completed all requirements for the degree) and good knowledge of VLBI data calibration. Good programming skills and knowledge of the physics of active galaxies are also requested. The aforementioned required qualifications will be judged as follows:

- Scientific publications relevant to VLBI studies of active galaxies in international scientific journals (40%)
- Experience in VLBI data calibration (30%)
- Experience in scripting in Python (30%)

Location: IA - FORTH, Heraklion Crete GREECE

Start Date: February 1st, 2024

Project Duration: 12 months with possibility of extension according to the needs of the project and availability of funds

Monthly salary: 2400 euros (gross)

Application Submission

Interested candidates who meet the aforementioned requirements are kindly asked to submit their applications, no later than **January 4th, 2024, 23:59 local Greece** time to the address (info@ia.forth.gr), with cc to Dr. Carolina Casadio (ccasadio@ia.forth.gr).

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>)
- Brief CV
- Scanned copies of academic titles
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Any application received after the deadline will not be considered for the selection

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).

Selection Announcement

The result of the selection will be announced on the website of IA - FORTH.

Candidates have the right to appeal the selection decision, by addressing their written objection to the IA secretariat within five (5) days since the results announcement on the web. They also have the right to access (a) the files of the candidates as well as (b) the table of candidates' scores (ranking of candidates 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.

GDPR

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.

We inform you that under the Regulation EU/2016/679 you 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.

You 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.