

JOB OPPORTUNITY

Project: TITAN – Frugal Artificial Intelligence and Application in Astrophysics. An ERA Chair HORIZON EUROPE grant funded by the EU.

Position: Two Post-doctoral positions

Start date: Any date before the end of 2023

Duration: 2 years with possibility of extension

Salary: 45.000-50.000 €/year (gross income depending on family status)



Description The two positions are to work in cosmology and/or machine learning in the context of cosmology. Subjects of interest are optical and radio weak-lensing, High order statistics, EoR, inverse problems, deep learning, components separation, data on manifold, high dimensional and big data processing, etc.

The HORIZON project “TITAN – Frugal Artificial Intelligence and Application in Astrophysics”, funded under the HORIZON-WIDERA-2022-TALENTS-01 program aims to develop novel frameworks based on advanced signal processing and (deep) machine learning frameworks for distinguishing different cosmological models from such maps.

The post-doctoral researcher will be located at the premises of FORTH with a strong collaboration with the CosmoStat Laboratory at CEA Saclay. The post-doctoral researchers will be advised by [Jean-Luc Starck](#) (FORTH/CEA) and [Panagiotis Tsakalides](#) (FORTH).

Required qualifications:

- Ph.D. in Astrophysics, Computer Science, or related field
- Experience in machine learning and/or cosmology
- Publications in related fields
- Working experience in related European and/or national R&D projects

Desired qualifications:

- Decision-making and representation of the team at national and international levels

FORTH is the largest and most prestigious research center in Greece with modern facilities and highly qualified personnel. It comprises ten research institutes located throughout Greece. The Institute of Computer Science ([FORTH-ICS](#)) and the Institute of Astrophysics ([FORTH-IA](#)) are located in the main campus, around 5km south of Heraklion on the island of Crete, Greece. Members from both FORTH-ICS and FORTH-IA are involved in the TITAN project. The group is committed to diversity and equality, encourages applications from women and underrepresented minorities, and supports a flexible and family-friendly work environment. Benefits for this position include retirement, health care, and parental leave. [CEA Paris-Saclay](#) is located 20 km south of Paris, France, near various universities and other research centers. The CosmoStat group is a diverse and multi-disciplinary team of researchers working on various topics in cosmology and data science.



Learning, Research, Innovation

Interested candidates are invited to communicate with J.-L. Starck jstarck@cea.fr and P. Tsakalides tsakalid@ics.forth.gr, sending a cover letter and their CV by **May 31, 2023**. CVs can be sent before the deadline as positions could be filled before if an ideal candidate is found.