

## JOB OPPORTUNITY

**Project:** [TITAN](#) – Frugal Artificial Intelligence and Application in Astrophysics. An ERA Chair HORIZON EUROPE grant funded by the EU.  
Web site : <https://spl.ics.forth.gr/titan>

**Position:** Two Post-doctoral positions

**Start date:** Any date before the end of 2024

**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](mailto:jstarck@cea.fr) and P. Tsakalides [tsakalid@ics.forth.gr](mailto:tsakalid@ics.forth.gr), sending a cover letter and their CV by **December 15, 2023**. CVs can be sent before the deadline as positions could be filled before if an ideal candidate is found.