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## **High-Performance Scientific Data Processing Systems Administrator within the framework of the Recovery, Transformation and Resilience Plan – Funded by the European Union – Next Generation**

Opening Date: 16/11/2023  
Closing Date: 27/11/2023  
Job Reference: PIC2023-LHC-OPS-1

Port d'Informació Científica (PIC) is a scientific-technological center operated through a collaboration agreement between CIEMAT and IFAE research centers which is specialized in developing advanced tools and methods for scientific data analysis. We participate in research projects from multiple disciplines with challenging data environments, including particle physics, astrophysics, biology, materials science and others. Our main objective is to accelerate research by making data analysis more effective through the use of Machine Learning, High-Throughput Computing and Big Data techniques using distributed computing to support collaborative research.

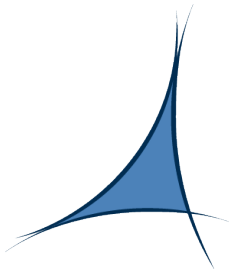
PIC is collaborating in several international research projects such as the ATLAS, CMS and LHCb experiments at CERN, the optical galaxy surveys DES, PAU, Euclid and DESI), the gamma-ray astronomy telescopes MAGIC and CTA, the neutrino experiments DUNE and T2K and the gravitational wave interferometers LIGO and Virgo.

PIC is looking for a highly motivated systems administrator with strong technical skills in linux and network administration and interest in scientific research.

The successful candidate will join the Operations team of the PIC data center and will work in close collaboration with scientists to develop, deploy and operate computing platforms to carry on the research data analysis.

### **Job Description**

- Ceph storage platform design, deployment and administration.
- Administration of distributed storage platforms and networks.
- Installation and configuration of IT services using automation tools such as Puppet or Kubernetes.
- Administration of linux systems.
- Monitoring and capacity planning of IT services.
- Development and maintenance of technical documentation of services.
- Technical procedures documentation for operators and developers
- Computing support for LHC experiments at PIC



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## Required Skills

- Degree in computer science, telecommunications or some scientific-technical discipline.
- Advanced knowledge of Linux system administration (minimum 6 years of demonstrable experience).
- Experience in Programming in scripting languages such as python or bash.
- Experience with Containers, Kubernetes.
- Experience in Computer systems administration using IT automation tools such as Puppet or Ansible.
- Experience deploying and managing a Ceph platform on the latest available versions (Quincy).
- Experience in Cluster job managers such as HTCondor or slurm.
- Experience in research support environments on international projects.
- Ability to effectively communicate and collaborate, as well as create a good working environment, with team members, researchers and supervisors.
- Proactive approach and ability to adapt and enhance IT services according to the user needs.
- Competence in spoken and written English.

You will have the support of the Operations and Services teams at PIC. Teamwork is of uttermost importance for this job.

## Contract characteristics

The recruiting center will be the Institut de Física d'Altes Energies (IFAE). The place of work will be the headquarters of PIC at Universitat Autònoma de Barcelona (<https://www.pic.es>)

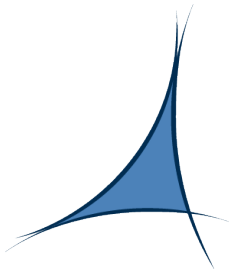
At least 1 position. A Full-time (40h/week) position with an “actividades científico-técnicas” contract (article 23-bis of the Spanish Act 14/2011, Ley de la ciencia, la tecnología y la innovación) linked to the project “Desarrollo de proyectos en el ámbito experimental de la física de partículas y nuclear, asociados a grandes experimentos en el CERN”, within the frame of the R+D+I Complementary Plans of the Spanish Government.

There will be a trial period of 2 months.

The position will correspond to “Enginyer” within the [IFAE professional categories](#). Salary will be commensurate with experience and qualifications within the corresponding category range. The successful candidate would start working at PIC as soon as possible.

## Application and Selection process

Applications should be submitted to [pic.jobs@pic.es](mailto:pic.jobs@pic.es) stating the job reference (PIC2023-LHC-OPS-1) as the Subject of the message. The mail should include a cover letter and an updated CV. Sending CVs to the above address implies consent to the legal warning at the bottom of IFAE's Home Page.



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The application must contain a personal identification number (DNI, NIE or passport) in order to proceed to the verification of absence of conflict of interest required by Recovery and Resilience Mechanism of the Spanish Government.

IFAE is an equal opportunity employer committed to diversity in the workplace and social integration of people with a disability. We welcome applications from all qualified candidates. People from groups that are typically underrepresented in the labor market in general and in Science and Engineering in particular, such as women, minorities, or people with a disability, are particularly encouraged to apply.

You may contact [pic.jobs@pic.es](mailto:pic.jobs@pic.es) for any questions related to this job opening.

A Selection Committee will evaluate the received applications. If more than one candidate seems equally suitable for the position, the Selection Committee will arrange an on-line interview with each one of them as part of the Selection process.

In compliance with article 121 of the Spanish Public Sector Legal Regime Act, staff with a pre-existing relationship with the Consortium administration (Generalitat de Catalunya and Universitat Autònoma de Barcelona) will have priority in the awarding of the position.

## Funding Statement

This contract is part of the project “Desarrollo de proyectos en el ámbito experimental de la física de partículas y nuclear, asociados a grandes experimentos en el CERN”, within the frame of the Spanish Government that are part component 17 of the Recovery and Resilience Mechanism. This contract is funded by the European Union – NextGenerationEU (MICINN/PRTR funds).



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**Next Generation**



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**Plan de Recuperación,**  
**Transformación**  
**y Resiliencia**

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Institut de Física  
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