

Post Title: Scientific Programmer

Organization: East African Institute for Fundamental Research (ICTP-EAIFR)

Location: Kigali, Rwanda

Annual Net Salary: \$32,400 (USD)

Deadline extended (midnight Kigali time): January 6th, 2025 (Applications will be evaluated on a rolling basis until this deadline)

Expected start date: April 1st 2025 (Flexible)

THE EAST AFRICAN INSTITUTE FOR FUNDAMENTAL RESEARCH

The ICTP-EAIFR is an ICTP Partner Institute with a UNESCO Category 2 status based in Kigali at the University of Rwanda (UR) (see <https://eaifr.ictp.it/about/>). The institute was created in 2018 with a view to position itself as a leading research and training institute in Eastern Africa in the broad area of theoretical and applied physics. The institute currently runs a vibrant program consisting of in-house full-time research faculty, PhD students and students enrolled in a 2-year Master program in Physics. Since its inception, ICTP-EAIFR has hosted visiting scientists from around the globe and run numerous workshops and schools.

The institute is committed to diversity and aims for geographical and gender balance.

OVERVIEW OF THE FUNCTIONS OF THE POST

The ICTP-EAIFR seeks to employ an individual with demonstrable experience in computer modelling and a willingness to contribute to the computer implementation of ongoing research projects at the institute. This role would suit someone that has a scientific background and a strong interest in computational modelling and computer technology.

The scientific programmer reports to the Director of ICTP-EAIFR. In undertaking his/her work, the incumbent to this position will work closely with the Director, the staff of the Institute, including postdocs, and the Master and PhD students at ICTP-EAIFR. The incumbent will undertake responsibilities which include:

§ Support in computational modelling of ICTP-EAIFR staff, students, visitors of ICTP-EAIFR. This will require knowledge in programming and numerical methods and software libraries for scientific computing used in disciplines such as Condensed Matter Physics and Geophysics.

§ Leading the planning, configuration and management of small/medium size, scalable High-Performance Computing systems, including operating systems, filesystems, networking and system software, and to the development of long-term strategies for sustainable deployment practices.

§ Monitoring the computer networks for security issues, investigating security breaches and other cybersecurity incidents, and installing security measures and operating software to protect systems and information infrastructure, including firewalls and data encryption programs

§ Management of the ICTP-EAIFR webmail, website and Twitter account.

SELECTION CRITERIA

- A postgraduate degree (preferably a PhD degree), with extensive relevant experience, or an equivalent combination of education, training and experience demonstrating the capacity to undertake the role.
- Solid understanding of the needs and priorities of contemporary research which relies on computational science techniques and methods, and particularly for large-scale data analysis applications.
- Demonstrated high level of knowledge and extensive experience in the core aspects of high-performance computing systems (including cluster filesystems, high performance interconnects, operating systems, and power and cooling efficiencies).
- Demonstrated high level oral and written communication skills; including a proven ability to plan and write high quality reports, assessments and documentation; and adapt to change as infrastructure and service requirements evolve.
- Proven experience in managing and working within a team to deliver outcomes and ability to interact with and help young scientists break down technological barriers to scientific research.
- A demonstrated high level of understanding of equal opportunity principles and a commitment to the application of equal opportunity policies in an academic context.

BENEFITS AND ENTITLEMENTS

The recipient gets a contract from SPIU-UR renewable every year. The net annual remuneration is 32,400 USD. RSSB medical insurance is provided.

HOW TO APPLY

Candidates must use the ICTP's online application system which is accessible via ICTP's website at <https://www.ictp.it/home/work-ictp>

In addition, Candidates should submit their application dossier to personnel_office@ictp.it including their: 1) Motivation letter, 2) CV and 3) Experience Statement.

For information: Personnel Office, Abdus Salam International Centre for Theoretical Physics, Strada Costiera, 11, 34151 Trieste, Italy.

E-mail: personnel_office@ictp.it, phone: +39-040-2240-595/596/695