basque center for applied mathematics

EXCELENCIA SEVERO OCHOA

IC2025_03_01 BCAM International Call

Postdoctoral Fellowship in Quantum Computing

Job Offer	
Topics:	**The Basque Center for Applied Mathematics is launching one Postdoctoral position of 1 year, to work in the area of Quantum Technologies.** The candidate is expected to work as a Postdoctoral researcher in "Quantum benchmarking and verification of quantum processors and quantum algorithms" in the Quantum Computing and Architectures group led by Dr. Mikel Sanz. This position is part of the European Quantum Technologies Flagship project OpenSuperQPlus and a collaborative project with IBM funded by BasQ, the Basque Government's initiative to promote Quantum Technologies. Verification and benchmarking of quantum processors is the problem of developing efficient and scalable metrics to certify the proper functioning of the processor, in the first case, and to enable fair comparison of processors, in the second. With the current scaling of quantum processors, these issues have become crucial. These metrics can have a volumetric or application-based character, and the researcher will work on both, especially on applications related to quantum algorithm to solve PDEs. If you are a passionate about Quantum Computing with strong background and interest in experimental science, and eager to embark on a research career at BCAM, this opportunity is for you. Apply now and become part of our dedicated team at BCAM.
PIs in charge:	Dr. Mikel Sanz
Salary and conditions:	**The gross annual salary of the Fellowship will be: 30.744€ - 37.331€ according to experience.**

	It will then be on your own responsibility to make your yearly income declaration at the Bizkaia Treasury Agency. Additionally, we offer a moving allowance up to 2.000€. Should the researcher have a family at the time of recruitment: 1. 2.000€ gross in a single payment will be offered (you must be married-official register or with children and the certificate to prove it must be sent). 2. 1.200€ gross per year/per child (up to 2 children) will be offered (the certificate to prove it must be sent). *Free access to the Public Health System in Spain is provided to all employees.*
Nº Positions offered:	**1**
Contract and offer:	**1 year**
Deadline:	**March 24th, 2025, 14:00 CET (UTC+1)**
How to apply:	Applications must be submitted on-line at: https://joboffers.bcamath.org

Scientific Profile Requested	
Requirements:	• Degree in Physics, Mathematics, or related fields. • PhD degree in quantum physics which the applicants must hold before May 2025.
Skills and track-record:	• Good interpersonal skills and ability to work as part of a collaborative & interdisciplinary research team. • A strong track record with research publications in top-ranked scientific journals and conferences. • Ability to present and publish research outcomes in spoken (talks) and written (papers) form. • Good command of the English language, both written and spoken • Desirable experience working in the framework of international research projects.

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Scientific Profile:	In the selection procedure we will appreciate: • Strong background in quantum computing or quantum information. Desirable background on verification, benchmarking and/or quantum algorithms. • Solid programming skills. • Interest and disposition to work in interdisciplinary groups and particularly, in the frontier between physics and computer science.

Application and Selection Process	
Formal Requirements:	The selected candidate must have applied before the application deadline online at the webpage: https://joboffers.bcamath.org The candidates that do not fulfil the mandatory requirements will not be evaluated with respect to their scientific profile.
Application:	Required documents: ▪ CV ▪ Letter of interest ▪ 2 recommendation letters ▪ Statement of past and proposed future research (2-3 pages)
Evaluation:	Based on the provided application documents of each candidate, the evaluation committee will evaluate qualitatively: the adaption of the previous training and career to the profile offered, the recommendation letters, the main results achieved (papers, proceedings, etc.), the statement of past and proposed future research and other merits; taking in account the alignment of these items to the topic offered.

BasQ Basque Quantum

OpenSuperQPlus

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