

Company Description

BCAM is the Research Center on Applied Mathematics created with the support of the Basque Government and the University of the Basque Country, which aims to strengthen the Basque science and technology system, by performing interdisciplinary research in the frontiers of mathematics, talented scientists' training and attraction, so the excellence of our results are recognized by the Society

Information

 Deadline: 2023-04-14
 Category: Business
 Province: Bizkaia

 Country: Basque Country
 City: Bilbao

Company

BCAM



Main functions, requisites & benefits

Main functions

BCAM is offering a postdoctoral position to work in Mathematics of Quantum Many-Body Problems and Quantum Information Science. The researcher will join Quantum Mechanics to work with Jean-Bernard Bru and Mikel Sanz.

Requisites

Promising young researchers.

Applicants must have their PhD completed before the contract starts.

The post holder will not be required to do any teaching but if desired he/she can deliver short courses, of his/her choice, at Ph.D. level. Also, if desired, the post holder can be involved in supervision of graduate students. The organization of scientific events will be also strongly encouraged. Skills and track-record: Good interpersonal skills. A proven track record in quality research, as evidenced by research publications in top scientific journals and conferences. Demonstrated ability to work independently and as part of a collaborative research team. Ability to present and publish research outcomes in spoken (talks) and written (papers) form. Ability to effectively communicate and present research ideas to researchers and stakeholders with different backgrounds. Fluency in spoken and written English. The preferred candidate will have one of these two scientific backgrounds: Research experience and interest in mathematical studies of quantum many-body problems (fermionic and bosonic cases). Knowledge of functional and convex analysis, operator algebra and quantum statistical mechanics. Note that a very good knowledge of the C^* -algebra approach to quantum statistical mechanics (CAR and CCR algebras) would be in particular strongly appreciated. Background in quantum information science, particularly in quantum algorithms and quantum computing, algebraic geometry and entanglement classification, QRACs and quantum memories, quantum benchmarking, AI-based design of quantum processors, quantum metrology and quantum radars, or inter-satellite quantum communications.

Benefits

Contract: 3 years The gross annual salary of the Fellowship will be 28.000€ - 34.000€ 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: 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). 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.