







Are you passionate about research?

Do you want to start your scientific career with us?

Discover how the **Basque Center for Applied Mathematics (BCAM)** could be the next step in your career and contribute to our goal: **Let's write together the Mathematics of the future**

BCAM is a research center of excellence in the field of Applied Mathematics, part of the BERC (Basque Excellence Research Centers) network and recognized three times as a Severo Ochoa Excellence Research Center.

Apply now with us for an INPhINIT fellowships launched by La Caixa Foundation!

We are looking for talented and highly motivated new researchers of any nationality, who wish to carry out the doctorate in our research center, with an attractive and competitive environment to carry out excellent research.

The fellowships cover four years of full-time research, with a competitive salary, a research budget, a personal development plan and Training programme on transversal skills. The fellows will also benefit from the mentoring and training activities offered by the INPhINIT program, as well as the networking and collaboration opportunities with other INPhINIT researchers and institutions.

We offer 6 PhD research projects:

- 1. **Gianni Pagnini**: Mathematical foundation of statistical mechanics of anomalous diffusion: investigating how far the existing models can go provided the basic physical principles and the experimental evidence.
- 2. **David Pardo**: Developing efficient cost functions for solving complex Partial Differential Equations (PDEs) in geophysics using Deep Learning and Neural Networks.
- 3. **David Pardo**: Revolutionizing biomedical signal processing by minimizing data acquisition and computation. Leveraging signal properties, we aim to reduce sensor samples and computation using unsupervised Machine Learning.
- 4. **Serafim Rodrigues**: PhD on advancing methods for personalised medicine based on Topological data analysis and Artificial Intelligence to determine clinical targets for Alzheimer's Disease. Collaboration with NIH-NIA/USA.
- 5. **Arghir Zarnescu**: A mathematical adventure towards creating the philosopher's stone (or some other equally magical material)









6. **Iñigo Urteaga**: Are you interested in Artificial Intelligence and Machine Learning? Join us to develop principled Machine Learning for its use in scientific, engineering and medical problems!

The deadline for submitting applications is February 15th, 2024 (14:00 CET).

Scholarship recipients must start at the host institutions between September and November 2024 (*).

(*) In duly justified cases it could be delayed until January 31, 2025.

Take advantage of this opportunity and apply for the INPhINIT scholarship with BCAM as your host institution. We look forward to receiving your applications and welcoming you to our research center.

For further information, please check the **INPhINIT** website.

If you have any questions or doubts on the research projects, please do not hesitate to contact us at:joinus@bcamath.org