



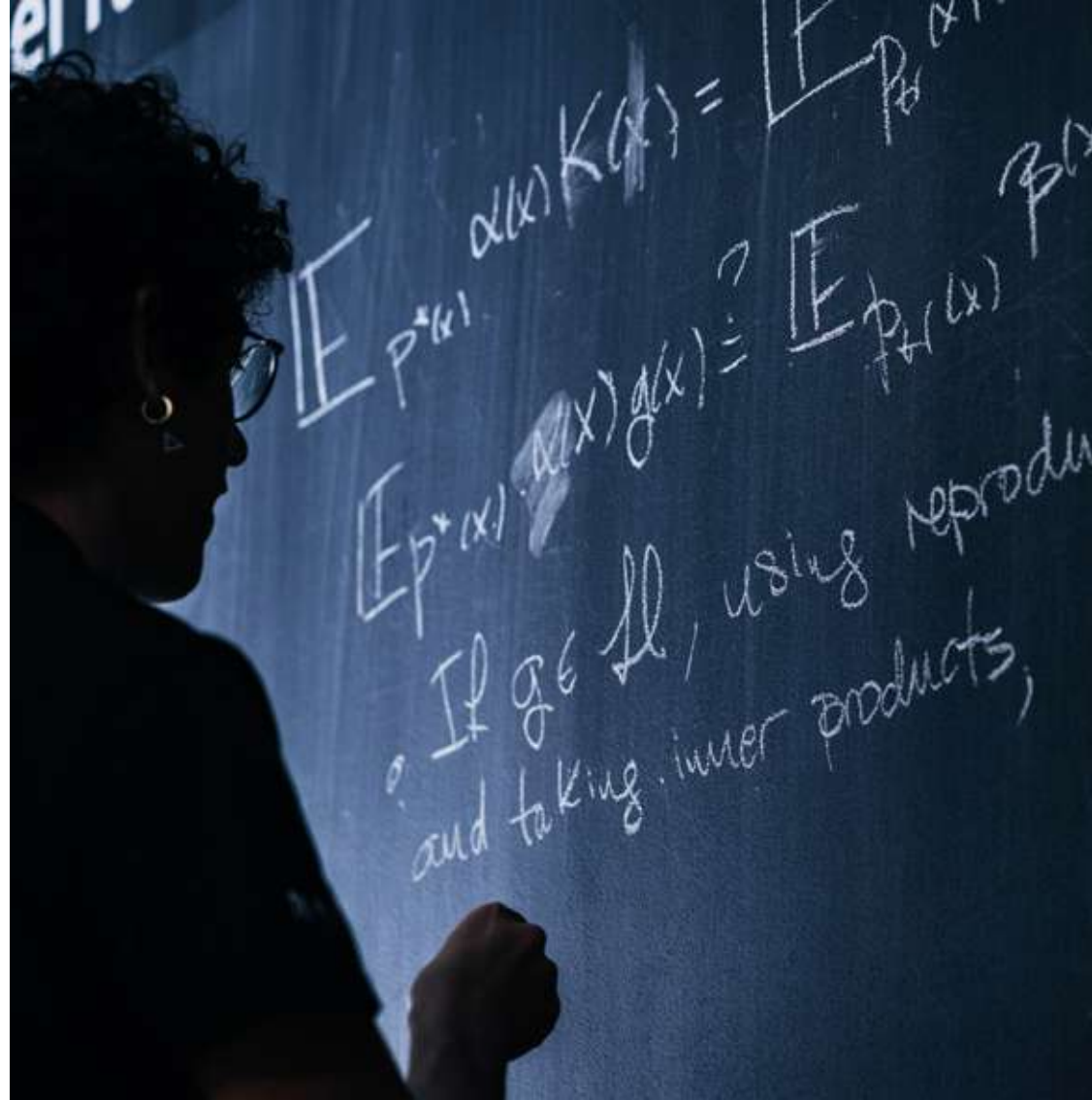
Scientific Director  
José A. Lozano

## Let's write together the Mathematics of the future

BCAM is a world-class interdisciplinary Research Center in the field of Applied Mathematics. **Founded in 2008 as a Basque Excellence Research Center (BERC)**, our focus is on interdisciplinary research in Mathematics, as well as training and attracting talented scientists, and promoting scientific and technological advances worldwide.

**The center has been awarded in three consecutive occasions (2013, 2017, 2021) with the Severo Ochoa distinction** that consolidates BCAM as one of the most relevant institutions of the field in Europe.

From the inception of humanity, Mathematics has always been the basis on which all natural and social sciences have been supported. Reciprocally, sciences have been the source of inspiration for most mathematical developments throughout history. In recent decades, technology has joined science in promoting Mathematics, demanding new mathematical developments capable of modelling such technology and predicting its behaviour. Similar to the case of science, this modern Mathematics is resulting in new technological advances. In BCAM, our goal is to be leaders in the discovery of the necessary Mathematics that contribute to a scientific and technological development oriented towards social welfare. That is our goal: to write together the Mathematics of the future.



## Research areas and lines

BCAM is committed to advancing its research agenda by fostering its established research groups and thematic lines of research, organised into 5 distinct areas corresponding to its scientific focus.

### CM

#### Computational Mathematics

- Mathematical Design, Modelling and Simulations - [MATHDES](#)
- CFD Modelling and Simulation - [CFDMS](#)

### M3A

#### Mathematical Modelling with Multidisciplinary Applications

- Modelling and Simulation in Life and Material Sciences - [MSLMS](#)
- Mathematical and Theoretical Biology - [MTB](#)
- Mathematical, Computational and Experimental Neuroscience - [MCEN](#)

### Mathematical Physics

- Quantum Mechanics - [QM](#)
- Statistical Physics - [SP](#)
- Singularity Theory and Algebraic Geometry - [STAG](#)

### MP

### Data Science and Artificial Intelligence

- Combinatorial Optimization - [CO](#)
- Applied Statistics - [AS](#)
- Machine Learning - [ML](#)

### DS

### APDE

#### Analysis of Partial Differential Equations

- Linear and Non-Linear Waves - [WAVE](#)
- Harmonic Analysis and Inverse Problems - [HA](#)
- Applied Analysis - [AA](#)



# BCAM in numbers 2023

### 1. Scientific Outputs

Year range: 2023. Data source: Scopus. Date exported: 27/02/2024.

172	81,9%	41,97%
Indexed articles	Q1	D1
62	1899	
H Index	BCAM publications are cited 6060 times in 2023 by 5139 documents	

### 3. Personnel

167  
Research staff

25%  
Women in BCAM

16  
Administrative staff

195  
People at BCAM

+ 36 new researchers  
22 visiting fellows  
24 interns  
131 visitors

### 2. Grants in Place

International public projects	2 ERC	1 FET	6 Marie Skłodowska-Curie	2 HE Cluster 4 (Digital, Industry & Space)
	24 Regional public projects	11 National public projects	11 Private projects	

### 4. Training and Knowledge Transfer

7 Defended Doctoral theses	45 Ongoing Doctoral theses
61 Ongoing Postdoctoral Trainees	6 Ongoing Joint Positions

## Join us and let's write together the Mathematics for the future!

BCAM is a highly recognised center that coordinates national and European projects and collaborates with other international centres. At BCAM you'll have the opportunity to join an international team, a great environment to improve professional career and personal growth.

Check out our latest job offers here:



### Flexibility

BCAM has established several flexibility measures related to working hours and vacation time. The objective is to maximize the compatibility of personal and professional life situations.

### Multi-cultural centre

Researchers from more than 30 nationalities work at BCAM.

### International mobility

The development of BCAM's activity entails the temporary relocation of staff. For this reason, BCAM has a series of processes that facilitate the advance and reimbursement of expenses and assistance abroad.

### Special regime for relocated workers

People who have not lived in Spain in the last 5 years can deduct up to 35% in the income tax for 6 years after they come here.

### Technology

BCAM offers to all the staff several advantages for the acquisition and the particular use of computer technologies.



### Youthful atmosphere

BCAM's staff consists of young and solid top scientists, with the ambition to go beyond their research and help to construct a win-win Environment.

### Relocation service

Bizkaia Talent is a non-profit association that support BCAM researchers and their families. Their Relocation Service, (EURAXESS Service Centre), was set in motion to advise and/or inform, free of charge, about administrative issues and how to adapt to living in the area of Bilbao (accommodation, education, health, leisure and so on).

### Training

BCAM offers all its staff training opportunities appropriate to each function and level of responsibility, to promote professional and personal aptitudes, and help their career growth.

## Knowledge Transfer Unit

One of BCAM's most important missions is to spread knowledge and technology in the industry and the society in general.

It is critical for the Basque Center for Applied Mathematics to transfer the obtained research results to sectors as biosciences, health, energy, advanced manufacturing, telecommunications and transport, including local, national and international entities.

For that purpose, BCAM offers expertise in many research fields to SMEs and large industrial groups, and supports the creation of new companies.



- The aim of BCAM Knowledge Transfer Unit is structured around four main objectives:
1. Multidisciplinary applied research projects.
  2. Mathematical challenges based of the real life.
  3. Scientific vocations, training, transfer activities and contribution to the improvement of mathematics social perception.
  4. Policy makers advice.

### Collaboration models

- Strategic partnerships
- Collaborative R&D&I projects
- Joint positions / research teams
- Supervision of Master and PhD Students
- Training courses
- Organization of dissemination activities

#### PARTICIPATING INSTITUTIONS



#### PROUD TO BE



HR EXCELLENCE IN RESEARCH



Mazarredo 14, 48009 Bilbao  
Basque Country, Spain  
T: +34 946 567 842  
F: +34 946 567 843  
info@bcamath.org  
www.bcamath.org

