





## **BCAM Internship: Control of Fluids**

The following BCAM Internship position is open at BCAM — Basque Center for Applied Mathematics, an interdisciplinary research center located in Bilbao, Basque Country — Spain.

The interested applicants can apply via the following webpage: <a href="https://joboffers.bcamath.org/">https://joboffers.bcamath.org/</a>

INTERNSHIP OFFER	
Research topic:	Control of Fluids
Research line:	Applied Analysis
Research topic description:	As an Intern at BCAM, you will embark on a unique opportunity to have a first contact with research.  This Master's thesis project offers an in-depth exploration of control problems in hyperbolic-parabolic coupled systems, with two intriguing application areas: compressible fluid dynamics (e.g., Navier-Stokes equations) or blood flow networks, depending on the student's interest.
	Hyperbolic-parabolic systems are essential in modeling dynamic behaviors in complex environments, where control strategies aim to influence or stabilize these systems under various constraints.  If you are eager to embark on a research career at BCAM, this opportunity is for you. Apply now and become part of our team at BCAM.
Keywords:	Controllability, Stabilization, Navier-Stokes Equation
Supervisor:	Arnab Roy and Jon Asier Barcena
Required knowledge and skills:	<ul> <li>Degree in Mathematics, or a related field, or be currently enrolled in a bachelor's program in one of these areas.</li> <li>Functional analysis, Basic PDEs</li> </ul>
Duration and dates:	6 months; between 1st April 2025 and 30th September 2025 (Flexible depending on the intern circumstances)









Conditions:	<ul> <li>Living in the Basque Country:         <ul> <li>Master's degree students/ PhD students: net salary of 350 € monthly</li> <li>Living in Spain:             <ul></ul></li></ul></li></ul>
	-Accommodation is covered by BCAMTravel expenses are covered and to be reimbursed:  ○ Up to 300 €, if the intern comes from the EU  ○ Up to 1000 €, if the intern comes from outside of the EU (to be checked on each country)
Application deadline:	March 1st, 2025









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